



POST-MILITARY LANDSCAPES

FUTURE AND TRANSFORMATION
OF MASARYK BARRACKS IN PARDUBICE

Faculty of Architecture & the Built Environment TU Delft

Petra Malinská

2/2

COVER GRAPHICS

Figure 1.

Petra Malinská, *Narrow-Gauge Railways in Pardubice in 1929/1930*, 2025, ArcGIS map.

sources:

Czech Office for Surveying, Mapping and Cadastre, 'DATA 50' (Geoportal of the Czech Office for Surveying, Mapping and Cadastre, 2025), [https://geoportal.cuzk.cz/\(S\(ug0zxysnxu2oi3vuo2dtxxit\)\)/Default.aspx?Ing=CZ&mode=TextMeta&side=mapy_data50&text=dSady_mapyData50&head_tab=sekce-02-gp&menu=2290](https://geoportal.cuzk.cz/(S(ug0zxysnxu2oi3vuo2dtxxit))/Default.aspx?Ing=CZ&mode=TextMeta&side=mapy_data50&text=dSady_mapyData50&head_tab=sekce-02-gp&menu=2290).

Podivín, Ladislav. *Pardubické drážky a železniční pluk*. Pardubice: Klub přátel Pardubicka, 2009.

CONTENTS

DESIGNING FOR EDUCATION	8
MID-20TH CENTURY APPROACHES TO SCHOOL BUILDING IN GREAT BRITAIN, SWITZERLAND, AND CZECHOSLOVAKIA	
A SCHOOL IN MASARYK BARRACKS	13
LIST OF LITERATURE	96

DESIGNING FOR EDUCATION

The question of how to design a school has been posed globally. While the goal remains consistent, to provide spaces for the education of children, the architectural responses may differ significantly. School construction is not merely a matter of spatial planning or architectural aesthetics; it is shaped by educational philosophies and a society's vision of education. Political and ideological systems have heavily influenced both the physical form of schools and the national values these structures are meant to express¹.

The mid-20th century marked a shift toward child-centred education, breaking away from traditional models². However, the devastation of World War II (WWII) left many school buildings destroyed. The post-WWII baby boom and the extension of compulsory schooling further exacerbated the shortage of educational facilities. As a result, school construction became a pressing need in the post-war years.

MID-20TH CENTURY APPROACHES TO SCHOOL BUILDING IN GREAT BRITAIN, SWITZERLAND, AND CZECHOSLOVAKIA

During WWII, prefabrication became a practical response to wartime destruction, in the Great Britain. It enabled a rapid replacement of bombed-out school buildings using simple, low-cost temporary prefabricated structures³. In the post-WWII period, there was a concerted effort to move beyond these makeshift prefabricated buildings in favour of more thoughtful, permanent learning environments⁴. The 1944 Butler Education Act, which raised the school-leaving age, coupled with population growth, prompted significant educational infrastructure development.

Architects Mary (née Crowley) and David Medd were instrumental in designing schools that embodied child-centred pedagogies. Drawing inspiration from educators such as Johann Heinrich Pestalozzi and Maria Montessori, the Medds replaced rigid, institutional spaces with

adaptable environments, so called centres, that mirrored domestic settings and provided spaces suitable for different types of work and group sizes⁵.

By introducing home-like elements such as reading nooks, carpeted corners, and rocking chairs, schools moved away from the traditional square classroom with rows of desks, toward flexible environments that reflected how children learn and interact with space⁶. The goal was to create spaces that supported diverse learning styles, because the environment affects not only learning outcomes, concentration, and school attendance of pupils but also the well-being of teachers⁷.

Flexible learning environments support group work and adaptability, giving students more choice and autonomy in how they use space, time, and collaborate⁸. Nevertheless, a design with movable furniture does not automatically ensure a dynamic or adaptable learning environment, because much of its effectiveness relies on the teacher's approach and use of the space⁹. As Kurz¹⁰ argues, a balanced approach is needed between open-plan schools and traditional closed classroom models, as each offers distinct advantages. Design must match the school's vision, as different teaching plans may have different spatial needs^{11, 12}.

5 Paula Lacomba Montes and Alejandro Campos Uribe, 'From Classrooms to Centres: Mary and David Medd's Contribution to Post-War School Design in Britain', n.d.

6 Paula Lacomba Montes and Alejandro and Campos Uribe, 'Mary and David Medd's Work: Domesticity in Postwar British School Design (1949–72)', *Oxford Review of Education* 47, no. 5 (3 September 2021): 597–617, <https://doi.org/10.1080/03054985.2021.1924652>.

7 Frederik Herman and Jo and Tondeur, 'Untangling the Sociomateriality of the Classroom: Biographies of School Spaces (c. 1960–2014)', *Oxford Review of Education* 47, no. 5 (3 September 2021): 681–95, <https://doi.org/10.1080/03054985.2021.1924654>.

8 Kreeta Niemi, Minkinen, Jaana, and Anna-Maija and Poikkeus, 'Opening up Learning Environments: Liking School among Students in Reformed Learning Spaces', *Educational Review* 76, no. 5 (28 July 2024): 1191–1208, <https://doi.org/10.1080/00131911.2022.2098927>.

9 Herman and and Tondeur, 'Untangling the Sociomateriality of the Classroom'.

10 Daniel Kurz et al., eds., *Schulhausbau - der Stand der Dinge: der Schweizer Beitrag im internationalen Kontext*; [erscheint anlässlich der Ausstellung 'Schulhausbau. Der Stand der Dinge', Zürich, 29. Juni bis 11. Juli 2004]: the Swiss contribution in an international context = School buildings - the state of affairs (Ausstellung Schulhausbau. Der Stand der Dinge, Basel Berlin: Birkhäuser, 2004).

11 P. Cardellino and P. and Woolner, 'Designing for Transformation – a Case Study of Open Learning Spaces and Educational Change', *Pedagogy, Culture & Society* 28, no. 3 (2 July 2020): 383–402, <https://doi.org/10.1080/14681366.2019.1649297>.

12 Steve Lawrence and Benjamin Stæhli, *Montessori Architecture: A Design Instrument for Schools* (Zurich: Park Books, 2023).

1 Catherine Burke and William and Whyte, 'The Spaces and Places of Schooling: Historical Perspectives', *Oxford Review of Education* 47, no. 5 (3 September 2021): 549–55, <https://doi.org/10.1080/03054985.2021.1973984>.

2 Burke and and Whyte.

3 Andrew Saint, *Towards a Social Architecture: The Role of School-Building in Post-War England* (New Haven: Yale University Press, 1987).

4 Saint.

Johann Heinrich Pestalozzi's assertion that *"the classroom must be a living room"*¹³ illustrates the effort to transform the school from an institution to a more domestic environment. Similarly, Czech educator Anna Süssová, in the early 20th century, argued for the preschool to be viewed as an extended home, emphasizing free play and emotional security: *"Until we get used to looking at preschools as an extended home where children can really play, they will not be true preschools."*¹⁴

15 The text on Czechoslovak schools is a shortened version of the research paper prepared in the course AR2A011 Architectural History Thesis.

In contrast to Great Britain, prefabrication and standardisation in Czechoslovakia¹⁵ became a main strategy of school construction after the 1948 coup d'état. Under a centrally planned economy, the socialist state pursued mass standardisation of educational buildings to meet the growing capacity demands caused also by the growing population and compulsory nine year-long education for all citizens mandated in the new Czechoslovak Constitution¹⁶.

In the late 1940s Czechoslovakia, the aim was to develop a limited set of standardised school designs to help small, especially rural, communities to reduce construction costs and improve the efficiency of school building. *"We do not dare or even want to extend the standardisation to all school buildings,"*¹⁷ stated educator Karel Josef Laboutka in the late 1940s. By the early 1960s, however, standard building methods were increasingly viewed as inadequate for ensuring equal educational opportunities for all students, leading to the decision that all new school buildings should be constructed merely using prefabricated and standardised building elements¹⁸.

The standardisation of school plans was seen as an egalitarian policy, meaning that every child, regardless of social background, was to receive the same educational setting¹⁹. Yet, this approach often resulted in spatial monotony, lack of contextual responsiveness, and

buildings that were criticised by architects for being rigid, impersonal, and disconnected from children's developmental needs as all classrooms were standardised in size and layout²⁰. The standardised projects often were an overview of the most straightforward solutions, which mainly strived for economic efficiency²¹.

Meanwhile, in the 1950s and 1960s Switzerland, architects and policymakers embraced the concept of the 'school as an open house', based on the integration of education, leisure, and community life within the school building. Heavily influenced by Congrès Internationaux d'Architecture Moderne (CIAM) urbanism and the Scandinavian hall-school model, Swiss schools were conceived not just as places of instruction, but as cultural and leisure centres²². The schools started to be embedded in neighbourhoods, within walking distance of homes, and included spaces for exhibitions, theatre, sports, and public meetings. Architect and reformer Gustav Mugglin advocated for schools as neutral ground, a space accessible to all people, regardless of age, politics, or religion²³.

The introduced models of centres and of a school as an open house, blending pedagogy with civic engagement, stood in contrast to the Czechoslovak approach. Where the Swiss and British school aimed to integrate, personalize, democratise, and domesticate the learning environments, the socialist Czechoslovak school prioritised uniformity, efficiency, and state authority as tool for indoctrination of its citizens, hiding the ideology behind a philosophy of equal opportunities.

13 Alfred Roth, *The New School* (Zurich: Girsberger, 1950), p. 42. In: Paula Lacombe Montes and Alejandro Campos Uribe, 'From Classrooms to Centres: Mary and David Medd's Contribution to Post-War School Design in Britain'.

14 Anna Süssová, *Kam Jsme Dospěli v Hromadné Výchově Děti* (Brno: Brněnská Matice školská, 1912), <https://ndk.cz/view/uuid:65d007a0-22d9-11e8-a0cf-005056827e52?page=uuid:d9210cf0-59d8-11e8-9d1d-5ef3fc9bb22f&fulltext=mate%C5%99sk%C3%A1%20%C5%A1kola%20velikost>.

16 'Ústava Československé republiky', Pub. L. No. 150/1948, § 12 (1948), https://www.psp.cz/docs/texts/constitution_1948.html.

17 Karel Josef Laboutka, *Stavba a zařízení školy* (Praha: Komenium, 1947).

18 Karel Josef Laboutka and František Koukal, *Pedagogické a hygienické požadavky na stavbu škol* (Praha: Státní nakladatelství technické literatury, 1961).

19 Bedřich Schráníl, 'Racionalizace ve výstavbě škol v ČSR', *Architektura ČSR*, 1958, ABA001.

20 Oldřich Starý, 'První Sjezd Svazu Slovenských Architektů: Nástup k Rozhodujícímu Boji Za Vyšší Ekonomickou, Technickou i Kulturní Hodnotu Investiční Výstavby', *Architektura ČSR*, 1960, <https://ndk.cz/view/uuid:982e2860-df48-11e6-9964-005056825209?page=uuid:d2aa6130-df83-11e6-b333-5ef3fc9ae867&fulltext=kritika%20typizace>.

21 Václav Kasalický, 'Rozvíjet Dále Obsahovou i Metodickou Stránku Projektování', *Domov - Kultura Bydlení a Životní Styl*, 1979.

22 Marco Di Nallo, 'Die Schule Als Offenes Haus: School Building and Leisure in Switzerland during the 1950s and 1960s', *The Journal of Architecture* 18, no. 5 (1 October 2013): 647–71, <https://doi.org/10.1080/13602365.2013.835854>.

23 Di Nallo.

As in Great Britain, publications, called Výstavba školských zařízení, issued by Studijní a typizační ústav on school construction were published in Czechoslovakia from the 1960s until late 1980s, presenting typical school construction projects. However, instead of showcasing examples of a good practice by which architects could be inspired designing their own projects, these publications consisted of typification directives that were mandatory documents for school building design.

CONCLUSION

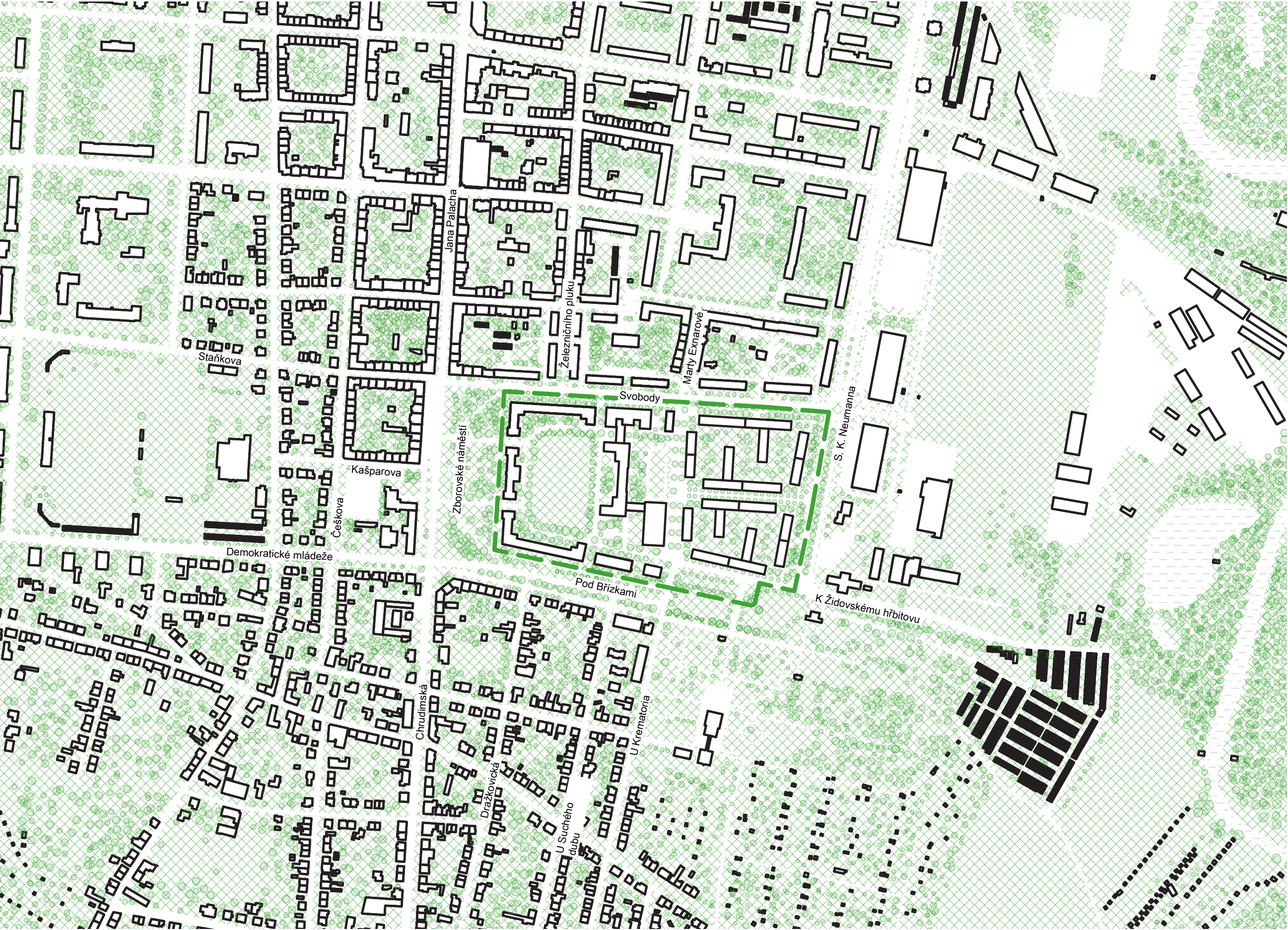
To conclude, the common points of the reform school efforts were similar initial conditions that led to them, such as population growth, the extension of compulsory education, or, after WWII, already outdated and inadequate school buildings and the reduction of the number of pupils in the classes. There was a similar effort to create an egalitarian environment within the schools, but in the context of Czechoslovakia it was conceived quite differently.

Both Great Britain and Czechoslovakia employed prefabricated systems to address the acute shortage of school places caused by WWII and its aftermath. However, their trajectories diverged: Great Britain gradually moved away from prefabrication, favouring more context-sensitive and pedagogically informed environments, while Czechoslovakia embraced standardisation and prefabrication, resulting in the construction of hundreds of nearly identical school buildings by the 1990s.

The varying approaches to school architecture ranging from the promotion of domesticity in Britain, to the integration of schools into neighbourhoods as community spaces in Switzerland, and the pursuit of equal opportunity through mass standardisation in Czechoslovakia demonstrated that educational architecture in the 20th century was shaped not merely by practical needs, but also by national ideologies and visions for the future of education.

A SCHOOL IN MASARYK BARRACKS





URBAN CONTEXT

alternative plan

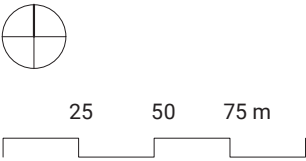
removal of fence

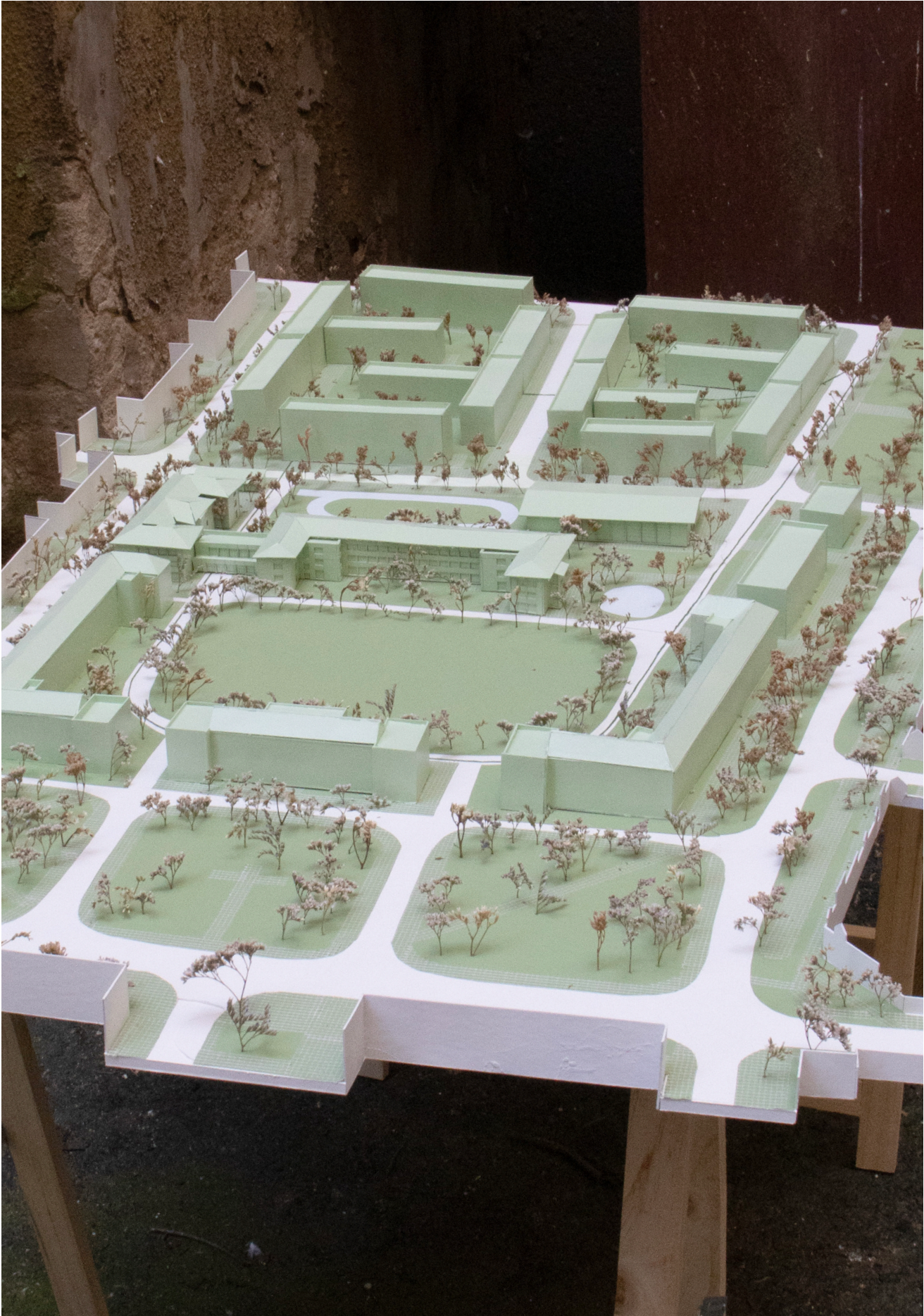
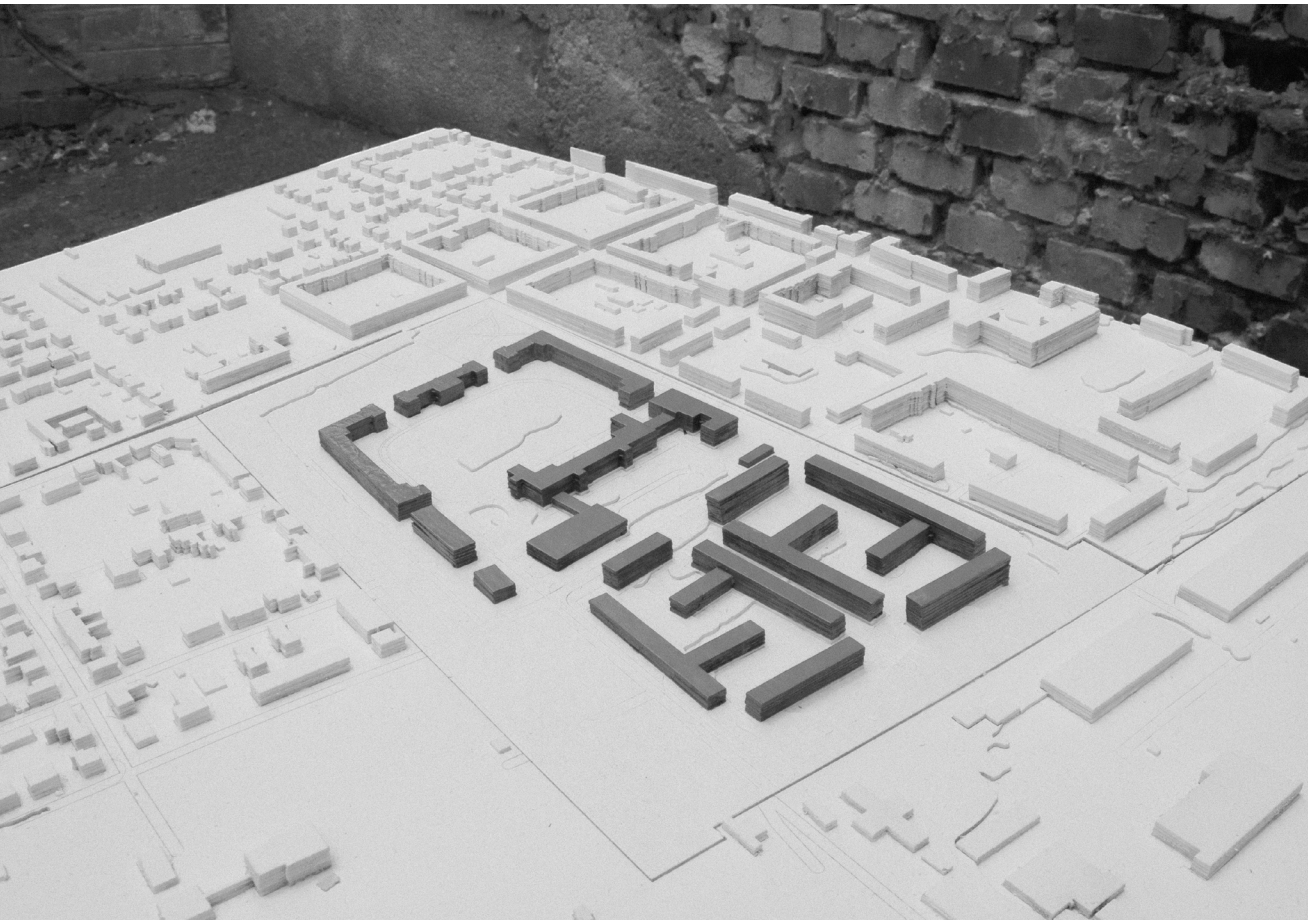
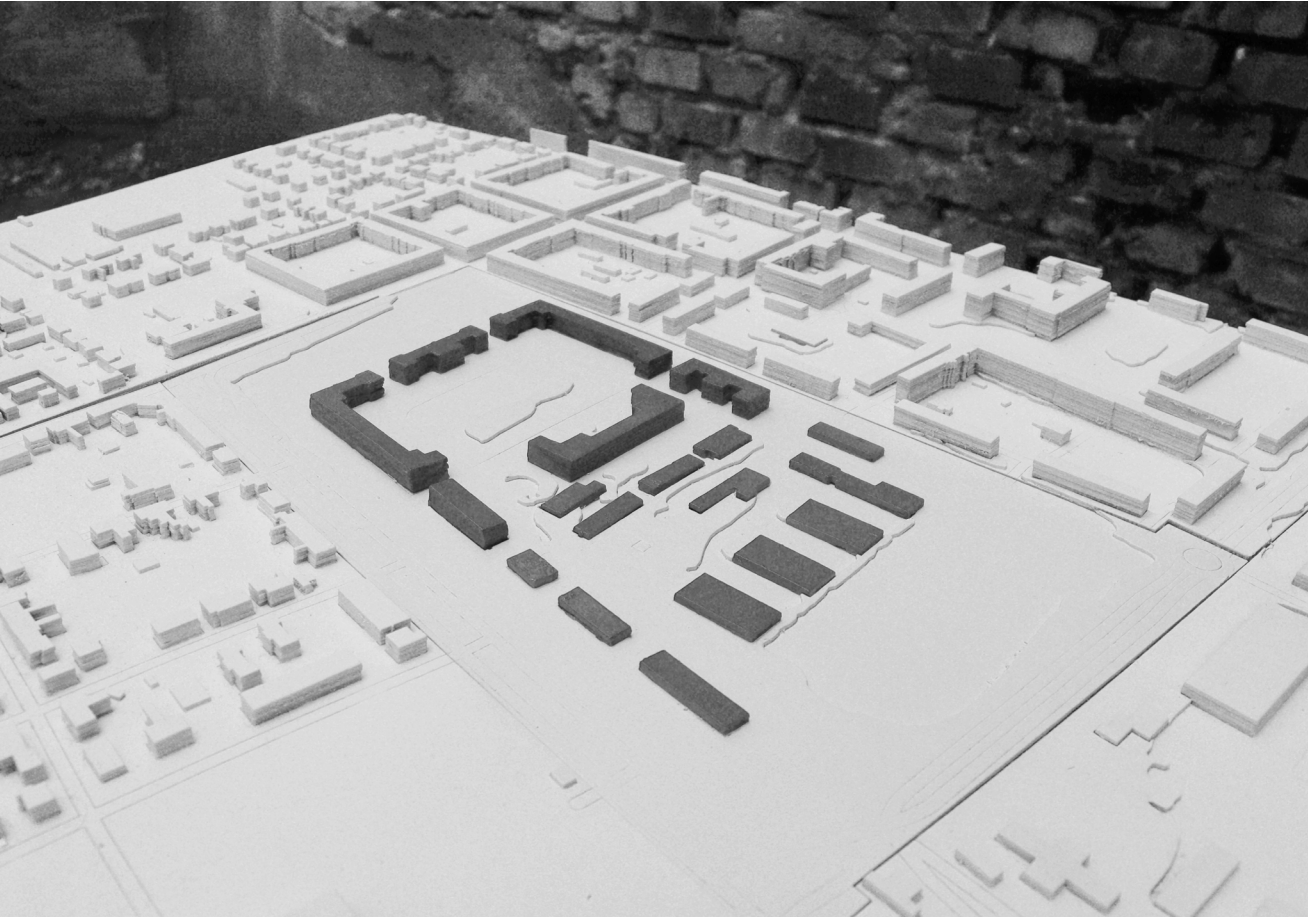
new street connections

juxtaposed yards

street line setback due to existing

tree alley







SITE PLAN

alternative plan

- restoration of two symmetrical western entrances
- teardown of the auxiliary buildings to the east
- marking the route of the narrow-gauge railway
- creation of a forecourt by the cemetery
- new bus stations

COMMON MEADOW

transforming the car park
into a meadow lined with tree alleys
and swales

heat island reduction

- Acer platanoides*
- Platanus acerifolia*
- Tilia cordata*

SWALE

- topsoil 150 mm
- sand layer 500 mm
- gravel 63/150 1000 mm
- filter fleece 5 mm
- subsoil

granite curbstone

- granite paving 50 mm
- gravel 4/8 20 mm
- gravel 16/32 150 mm
- gravel 0/8 180 mm
- subsoil



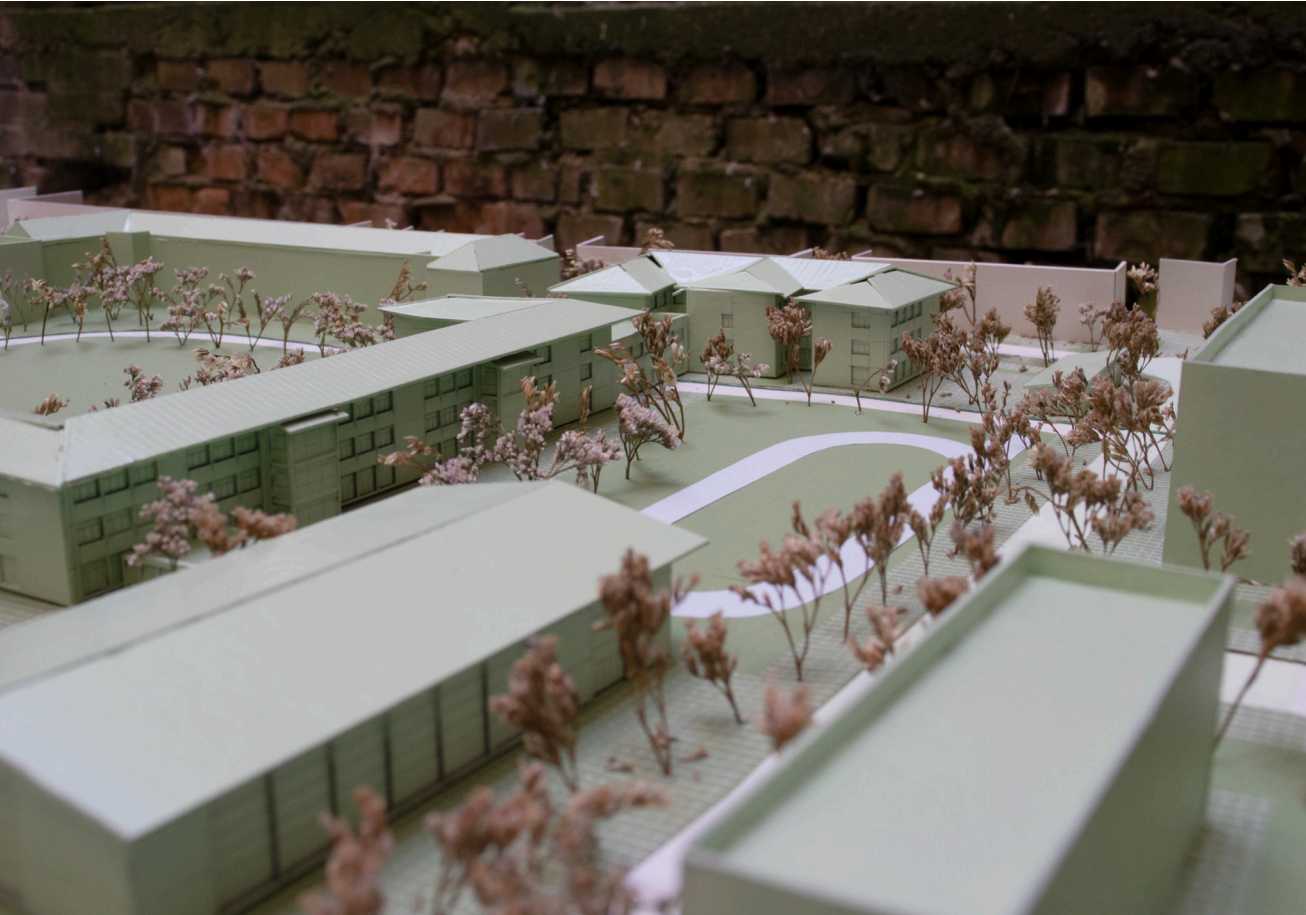
SCHOOL

1:400 site model

school grounds formed
from buildings IV., V. and the
gymnasium annex

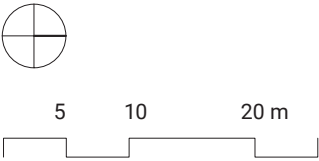
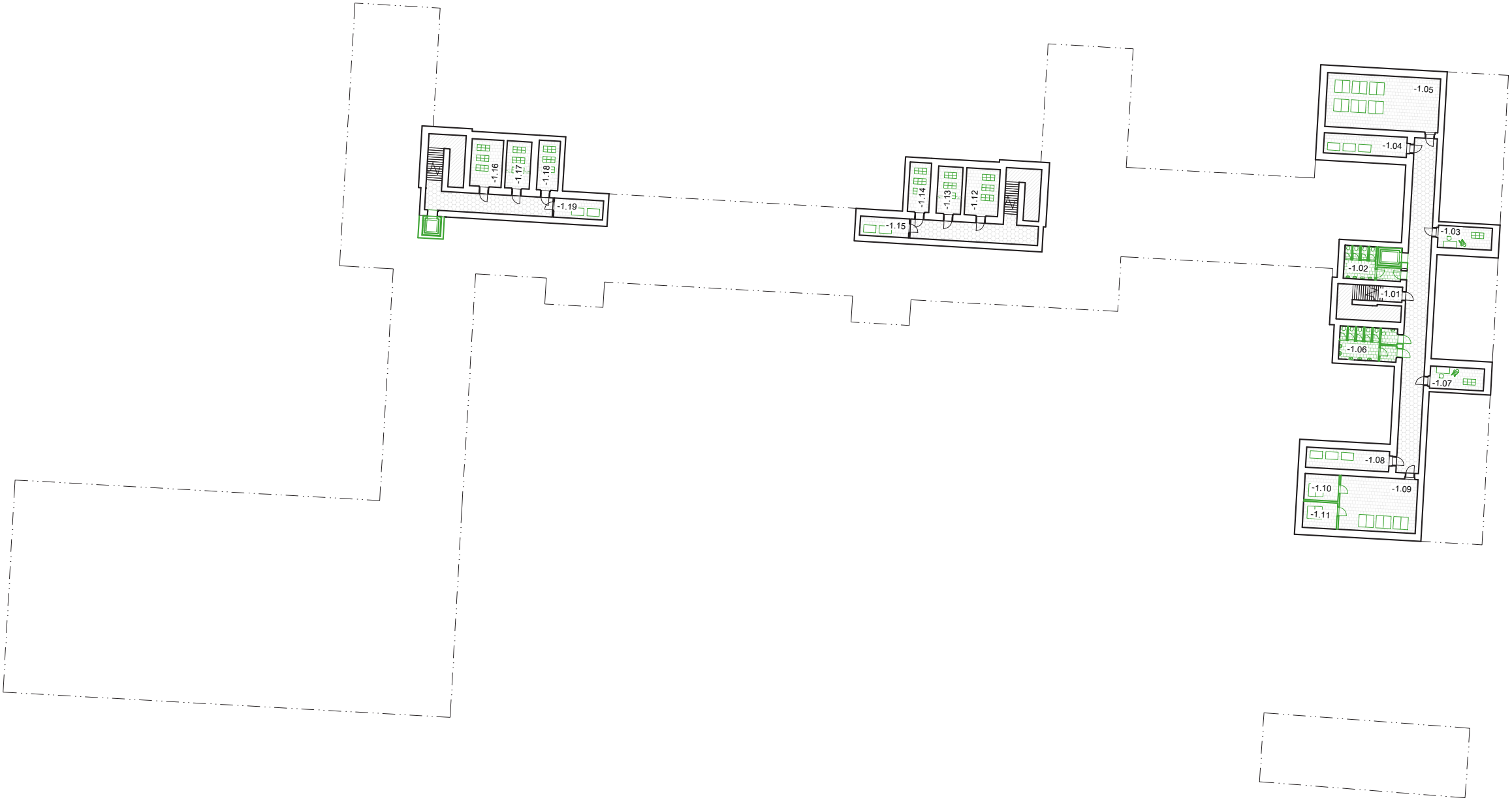
- central yard
- entrance yard
- school garden yard
- playground yard
- service yard
- retention pond yard
- and dining yard

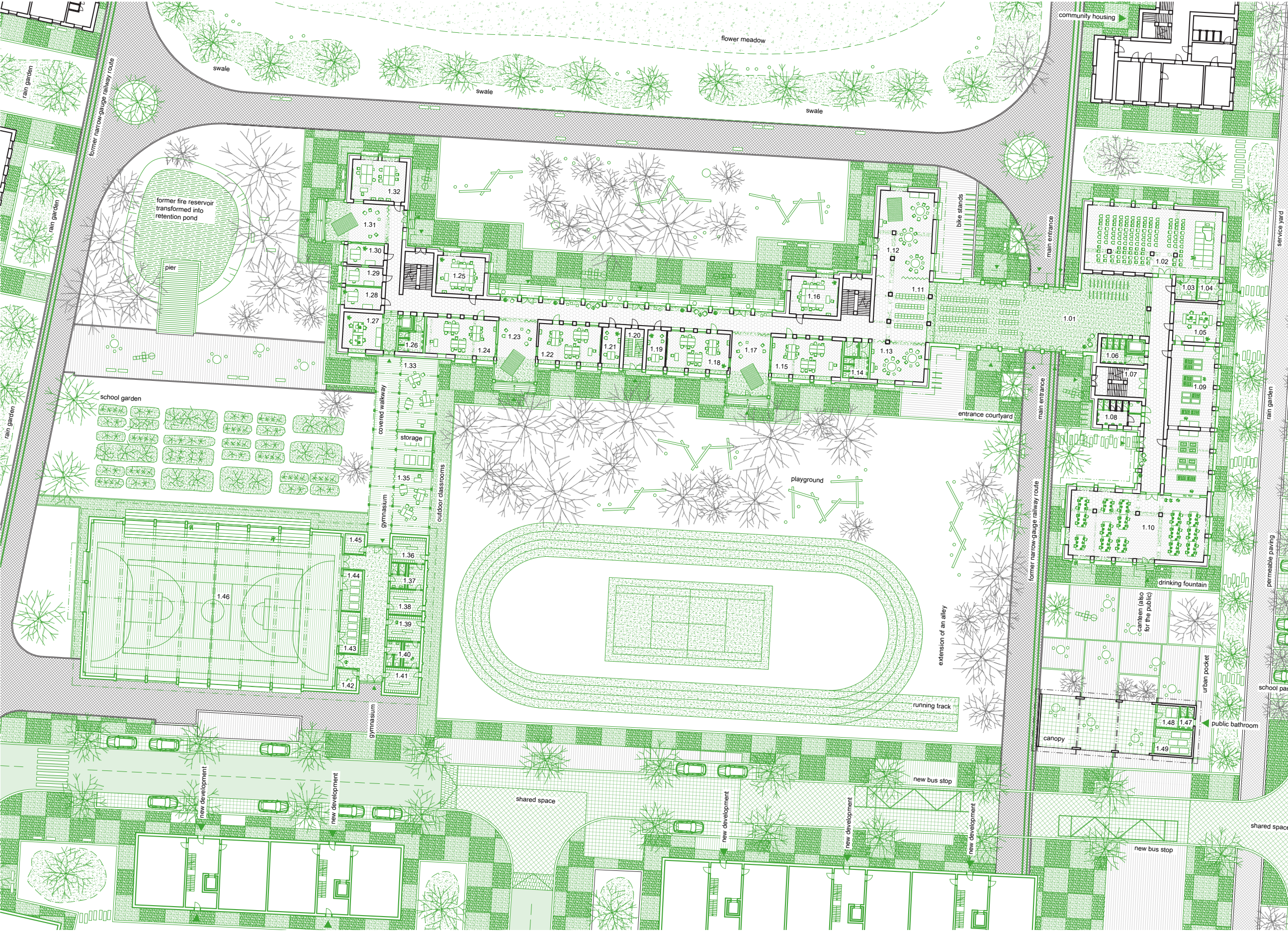




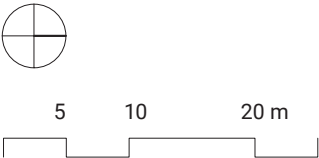
UNDERGROUND

-1.01 stairs	31 m ²
-1.02 toilets	20 m ²
-1.03 changing room	17 m ²
-1.04 technologies	25 m ²
-1.05 technologies	90 m ²
-1.06 toilets	28 m ²
-1.07 changing room	17 m ²
-1.08 food storage	25 m ²
-1.09 food storage	62 m ²
-1.10 refrigerator	13 m ²
-1.11 freezer	13 m ²
-1.12 technologies	23 m ²
-1.13 technologies	17 m ²
-1.14 storage	16 m ²
-1.15 storage	14 m ²
-1.16 technologies	23 m ²
-1.17 technologies	17 m ²
-1.18 storage	16 m ²
-1.19 storage	14 m ²
	481 m ²





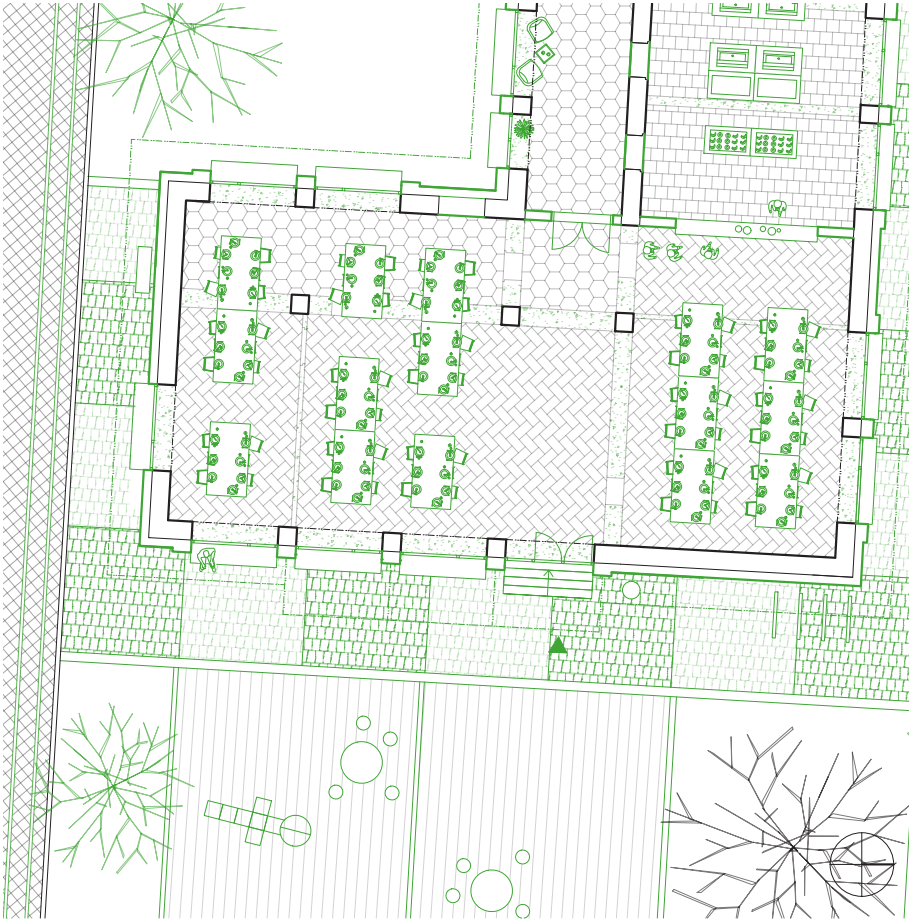
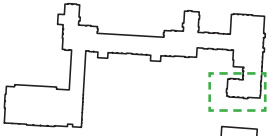
GROUND FLOOR		
1.01	foyer	197 m ²
1.02	multifunctional hall	225 m ²
1.03	changing room	12 m ²
1.04	storage	12 m ²
1.05	kitchen office	43 m ²
1.06	toilets	20 m ²
1.07	stairs	36 m ²
1.08	toilets	28 m ²
1.09	kitchen	61 m ²
1.10	dining room	225 m ²
1.11	lockers	232 m ²
1.12	school club	114 m ²
1.13	school club	50 m ²
1.14	toilets	23 m ²
1.15	first stage classroom	65 m ²
1.16	language classroom	46 m ²
1.17	rest area	60 m ²
1.18	first stage classroom	58 m ²
1.19	teachers' room	17 m ²
1.20	stairs	17 m ²
1.21	teachers' room	17 m ²
1.22	first stage classroom	58 m ²
1.23	rest area	60 m ²
1.24	first stage classroom	65 m ²
1.25	language classroom	46 m ²
1.26	toilets	23 m ²
1.27	teachers' room	36 m ²
1.28	psychologist	20 m ²
1.29	counselling	17 m ²
1.30	counselling	17 m ²
1.31	rest area	60 m ²
1.32	workshop	55 m ²
1.33	outdoor classroom	68 m ²
1.34	storage	33 m ²
1.35	outdoor classroom	68 m ²
1.36	changing room	22 m ²
1.37	bathroom	22 m ²
1.38	changing room	22 m ²
1.39	changing room	22 m ²
1.40	bathroom	22 m ²
1.41	changing room	22 m ²
1.42	office	9 m ²
1.43	storage	21 m ²
1.44	storage	21 m ²
1.45	storage	9 m ²
1.46	sports hall	1000 m ²
1.47	public toilets	7 m ²
1.48	storage	12 m ²
1.49	storage	24 m ²
		3419 m ²



URBAN POCKET

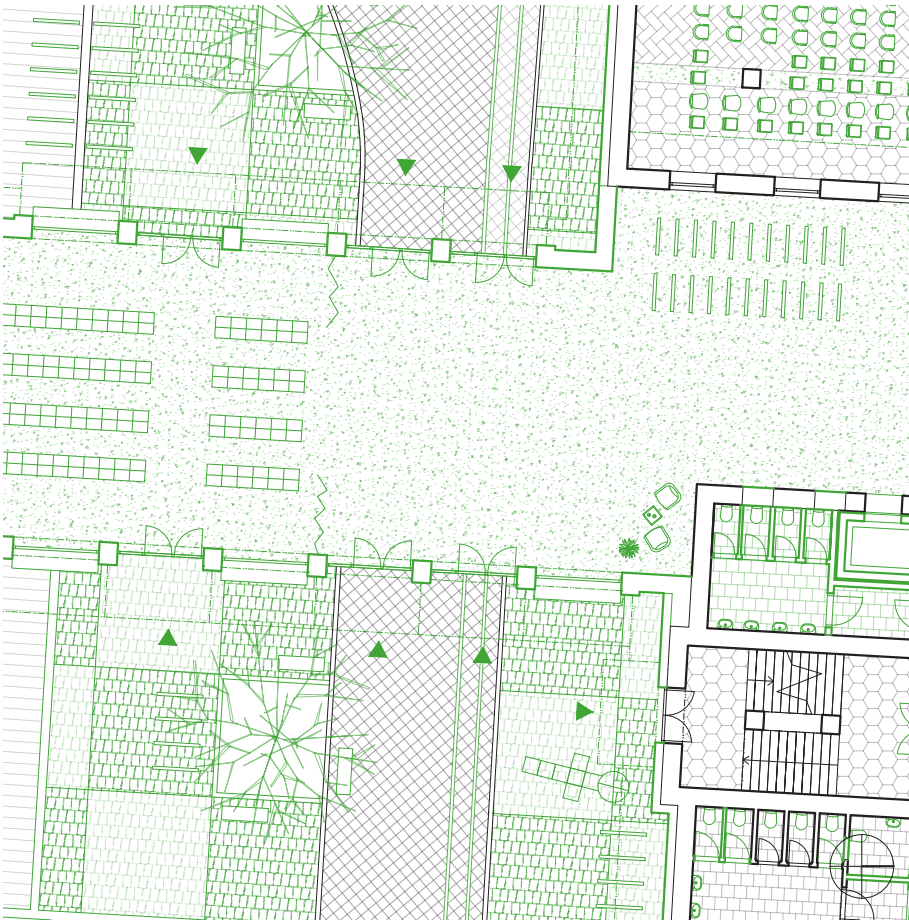
a place where the school meets
the public

dining
public bathroom
dispensing of leftover food



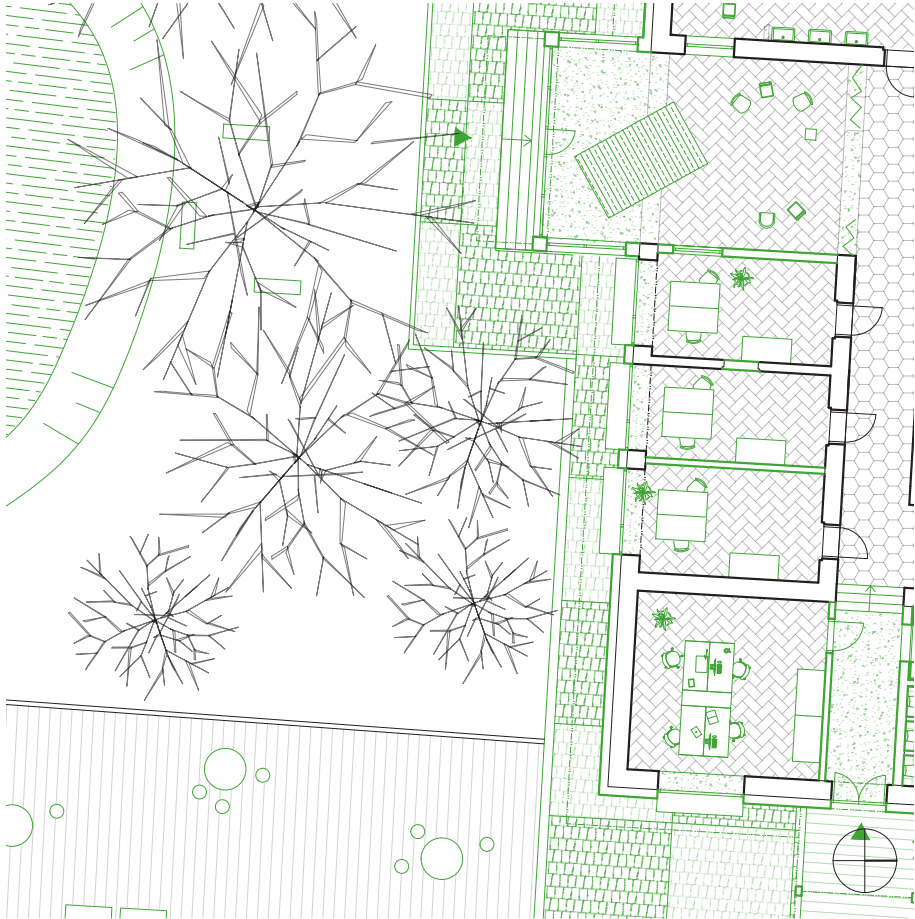
ENTRANCE YARD

entrance on the place
of the former narrow gauge railway
lockers



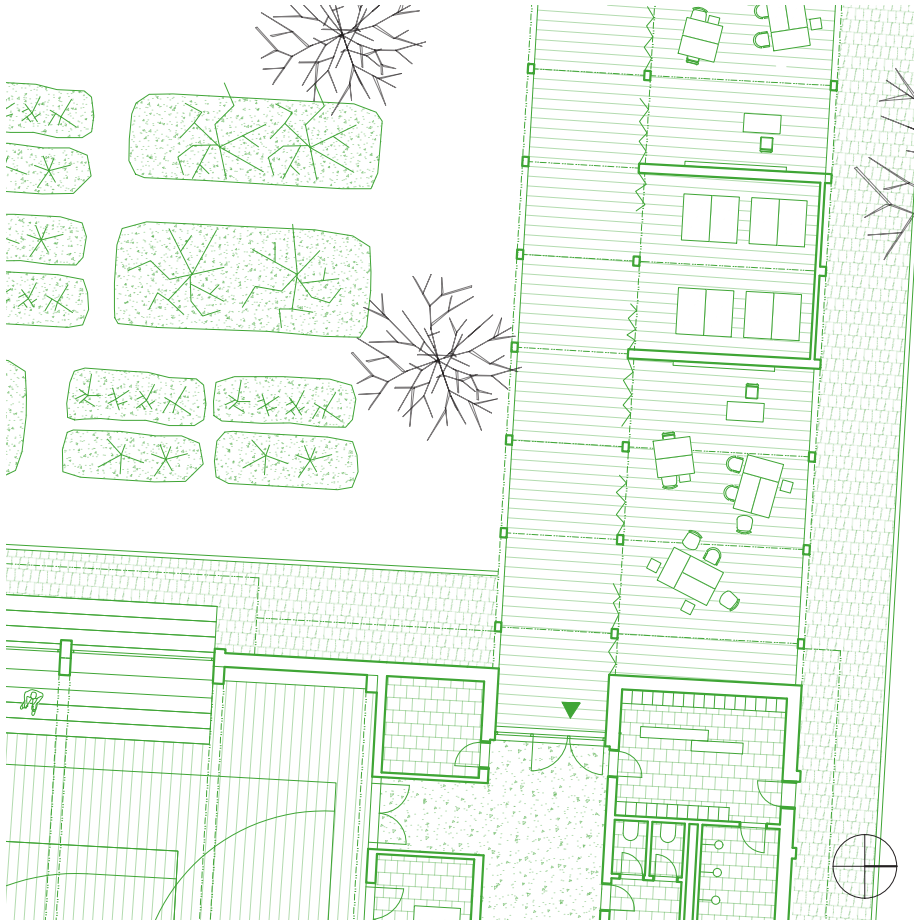
RETENTION POND

pier
offices
workshop



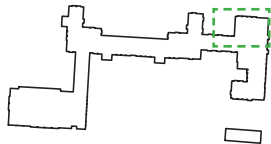
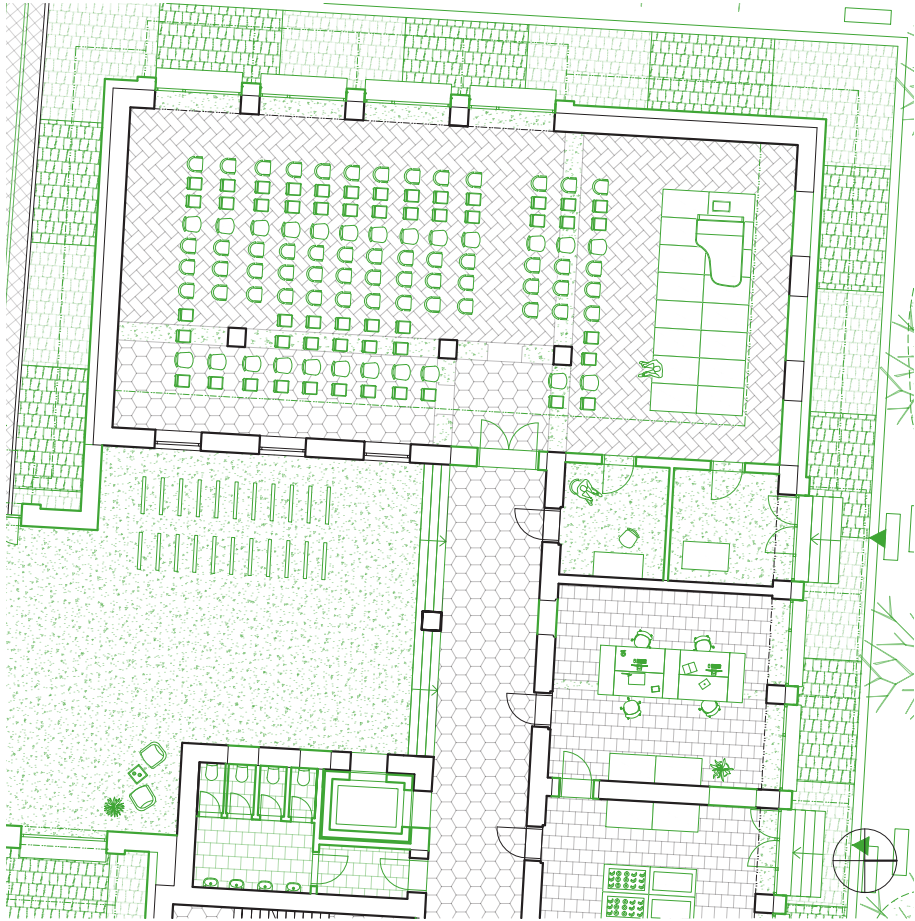
SCHOOL GARDEN

outdoor classrooms
covered passage
use of excavated soil from
the construction
of the sports hall
for planting



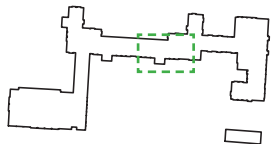
MULTIFUNCTIONAL
HALL

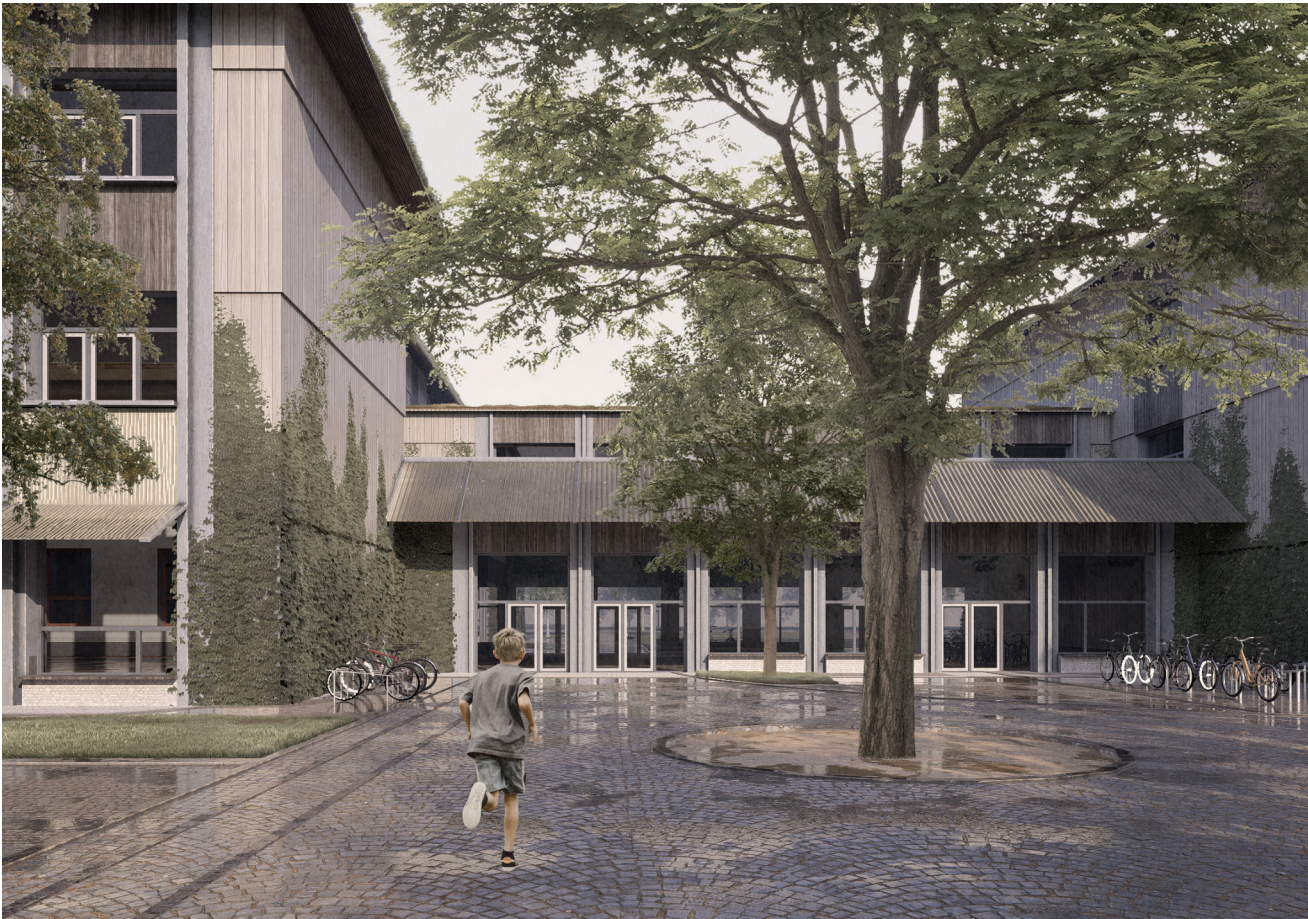
- double height space
- foyer
- kitchen

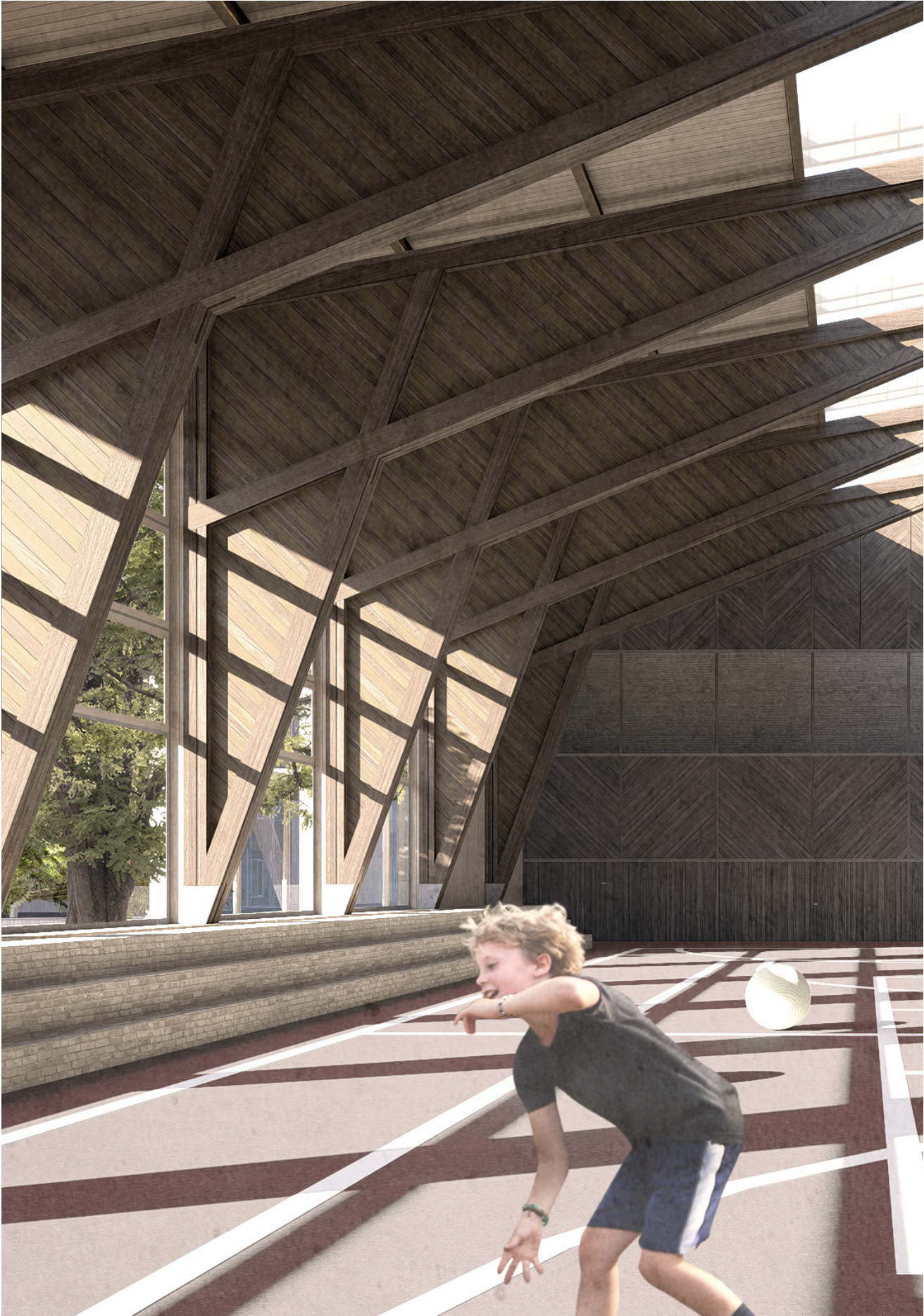
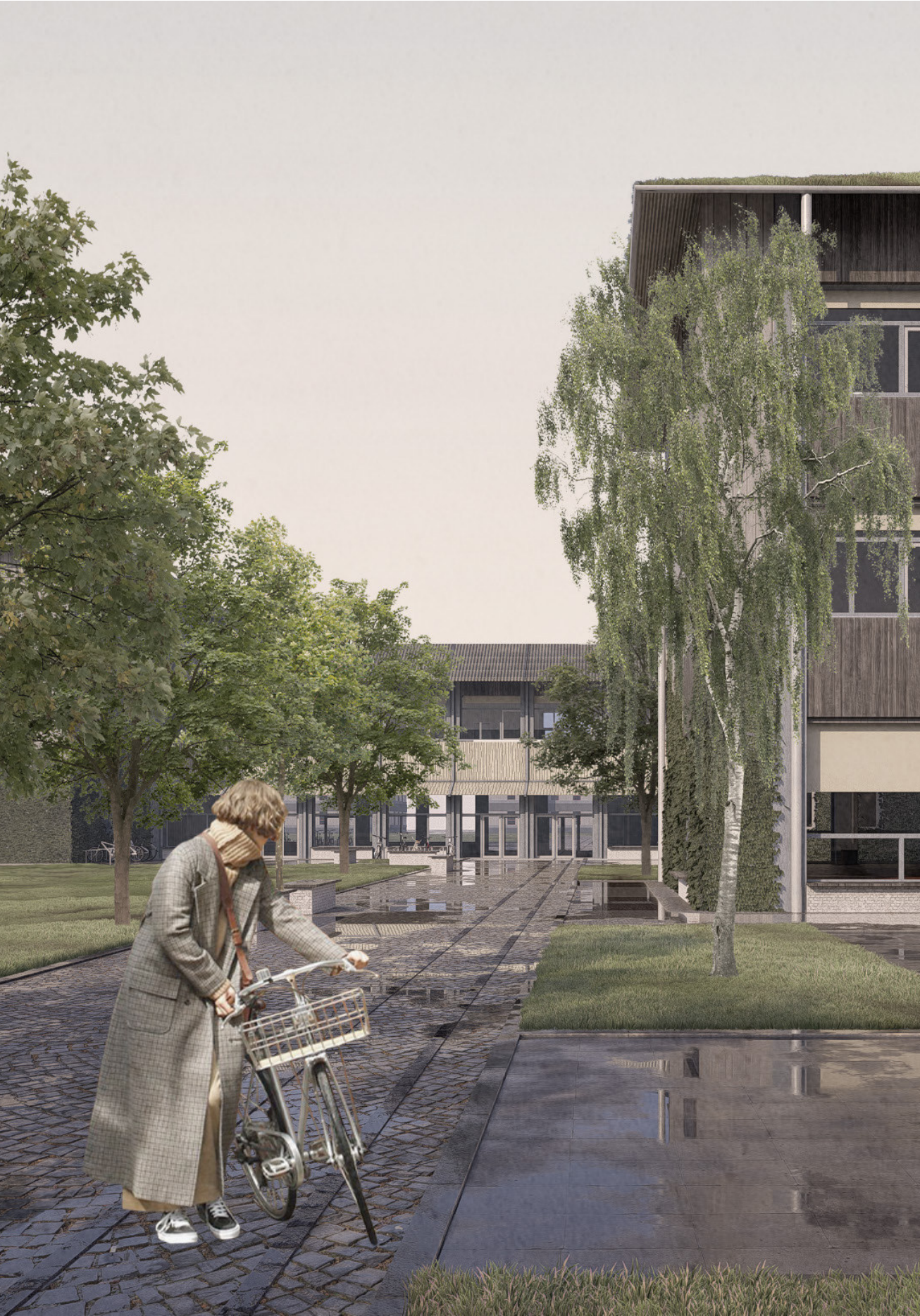


FIRST STAGE

- classrooms
- school club
- common niche
- playground yard
- recycled brick stairs
- serving as a bench

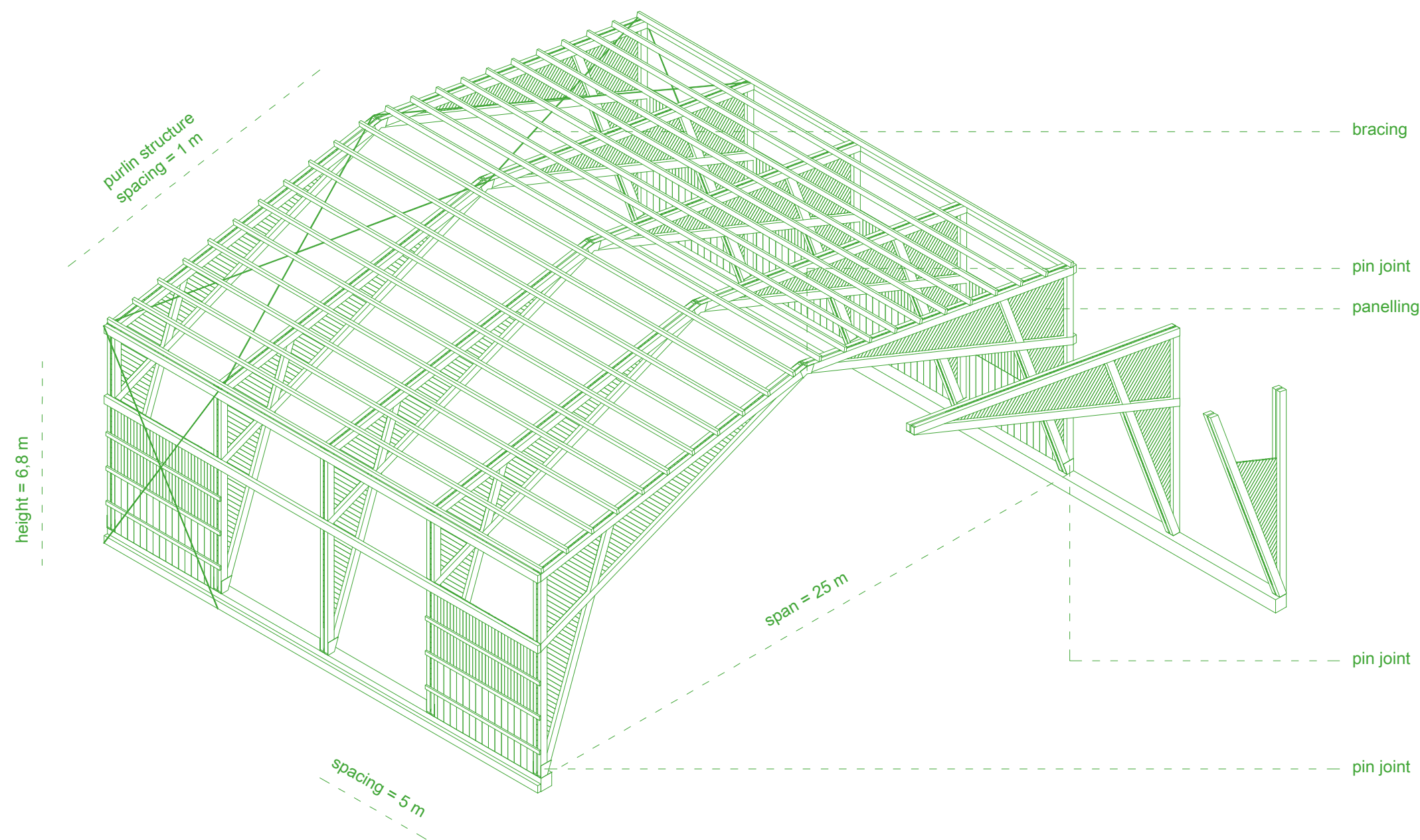






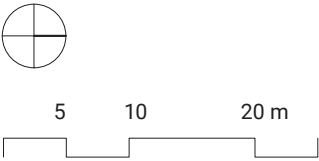
SPORTS HALL
STRUCTURAL SCHEME

3-pin portal frame with panelling
on a recycled brick wall



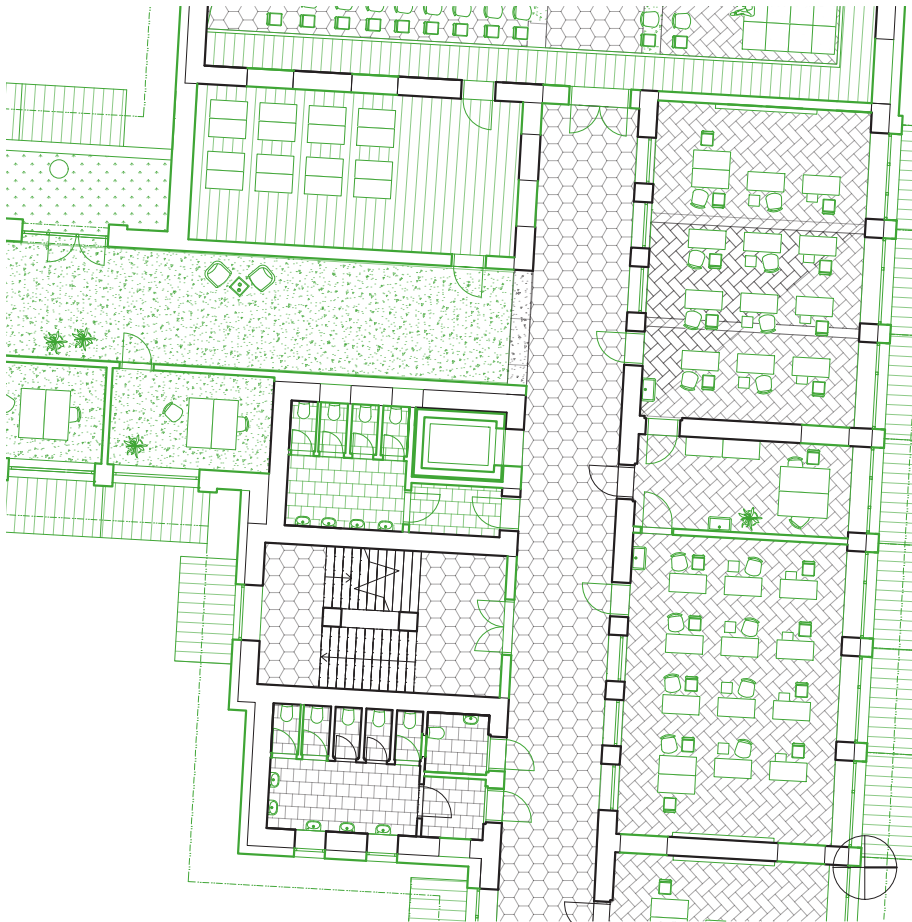
FIRST FLOOR

2.01 headmaster	24 m²
2.02 deputy headmaster	20 m²
2.03 economist	20 m²
2.04 accountant	16 m²
2.05 storage	53 m²
2.06 IT classroom	70 m²
2.07 teachers' room	21 m²
2.08 toilets	20 m²
2.09 IT classroom	70 m²
2.10 stairs	36 m²
2.11 toilets	20 m²
2.12 IT classroom	70 m²
2.13 teachers' room	20 m²
2.14 storage	18 m²
2.15 school club	54 m²
2.16 school club	56 m²
2.17 art	50 m²
2.18 toilets	23 m²
2.19 language classroom	46 m²
2.20 first stage classroom	65 m²
2.21 rest area	60 m²
2.22 first stage classroom	58 m²
2.23 teachers' room	17 m²
2.24 stairs	17 m²
2.25 teachers' room	17 m²
2.26 first stage classroom	58 m²
2.27 rest area	60 m²
2.28 first stage classroom	65 m²
2.29 language classroom	46 m²
2.30 toilets	23 m²
2.31 music	50 m²
2.32 first stage classroom	60 m²
2.33 rest area	60 m²
2.34 first stage classroom	55 m²
2.35 yoga room	150 m²
2.36 storage/technologies	20 m²
2.37 office	23 m²
2.38 small hall	72 m²
2.39 storage/technologies	20 m²
	1703 m²



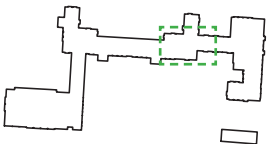
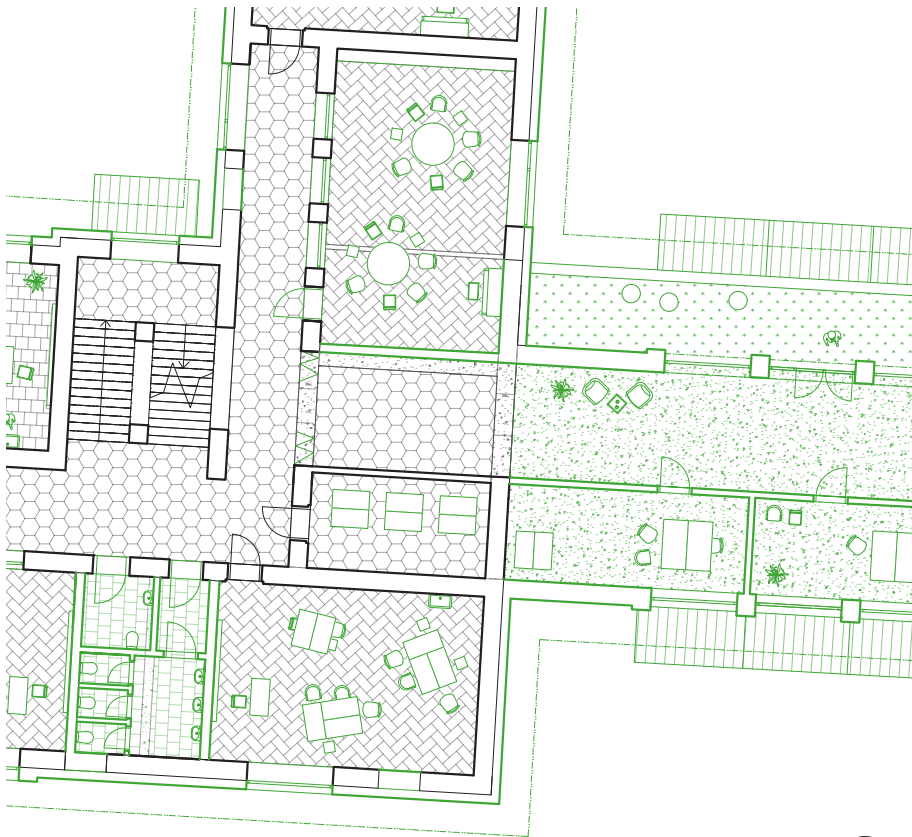
FIRST FLOOR

computer classrooms



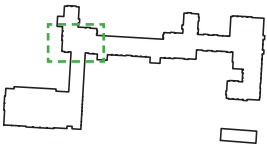
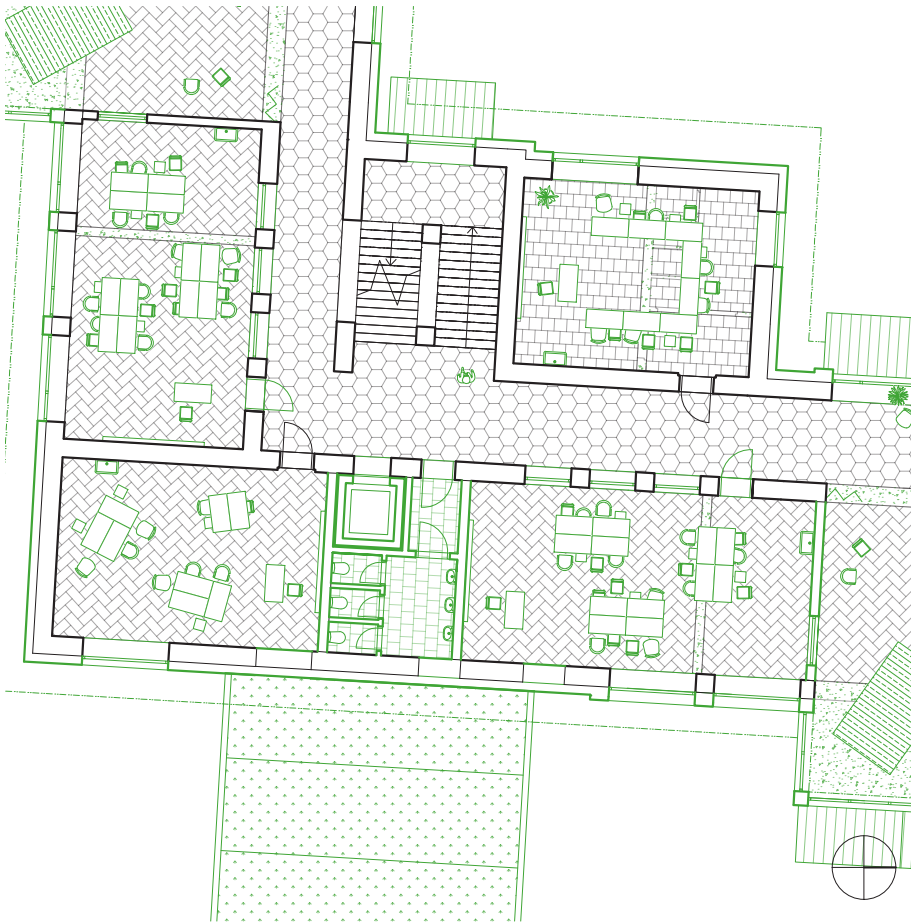
FIRST STAGE

school management
language classrooms
school club



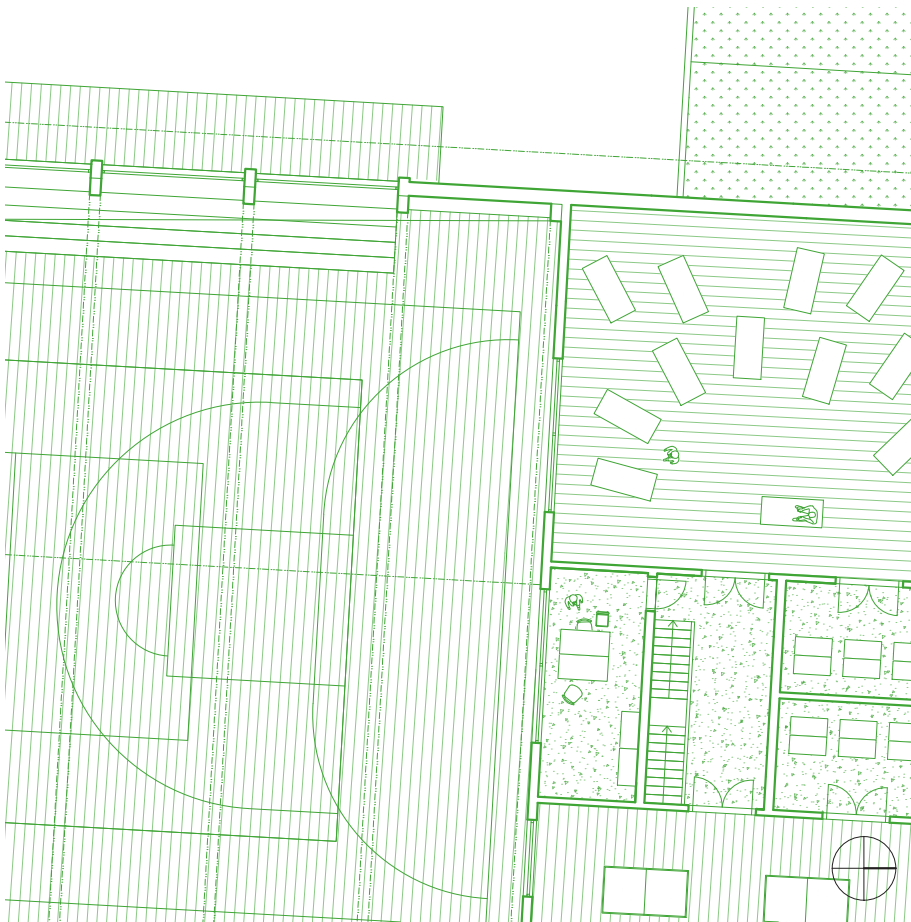
FIRST STAGE

first stage classrooms
language classroom



SPORTS HALL

yoga room
exercise equipment
storage
office
table tennis room







ENFILADE

Emanuel de Witte,
*Interior with a Woman at
the Virginal*, oil on canvas,
1665-1670, [https://
commons.wikimedia.org/
wiki/File:Interior_with_a_
woman_at_a_virginal,_
and_an_officer_listening_
in_the_bed_on_the_left,_
by_Emanuel_de_Witte.jpg](https://commons.wikimedia.org/wiki/File:Interior_with_a_woman_at_a_virginal,_and_an_officer_listening_in_the_bed_on_the_left,_by_Emanuel_de_Witte.jpg).

an element providing
a sense of generosity



VIEWS

creation of views through
classrooms and nooks
originating from
the enfilade

reused wooden windows

creation of a place
for observation



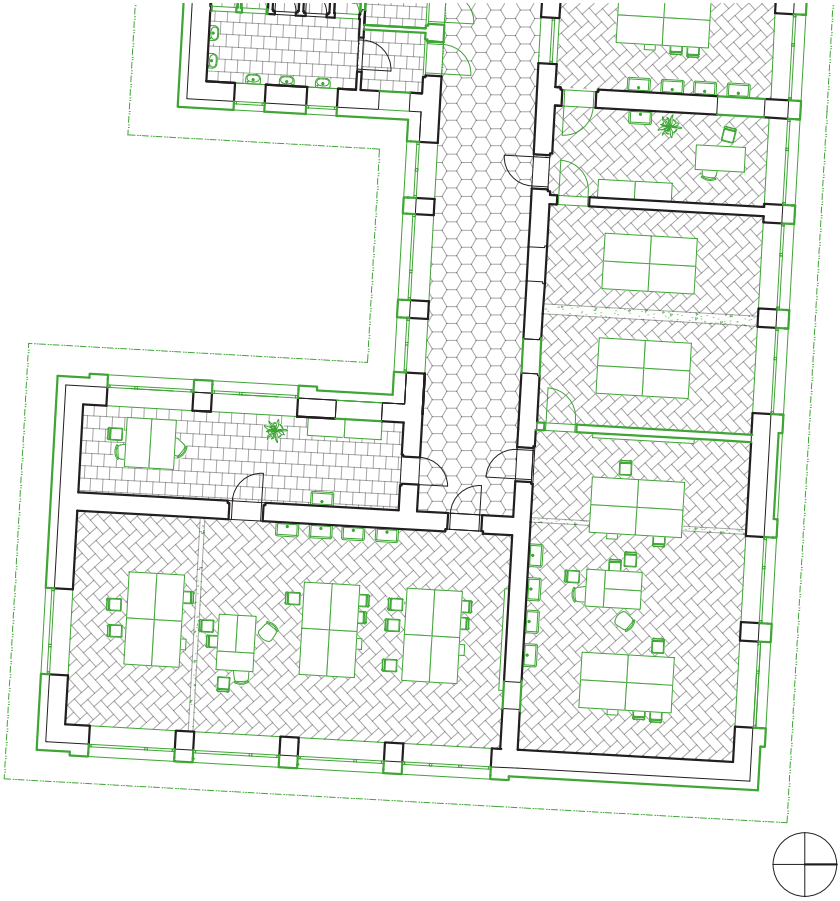
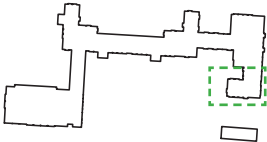
SECOND FLOOR

3.01 meeting room	98 m²
3.02 teachers' room	29 m²
3.03 geography classroom	72 m²
3.04 history classroom	72 m²
3.05 teachers' room	21 m²
3.06 toilets	20 m²
3.07 stairs	36 m²
3.08 biology classroom	68 m²
3.09 toilets	20 m²
3.10 teachers' room	21 m²
3.11 storage	42 m²
3.12 chemistry classroom	72 m²
3.13 physics classroom	98 m²
3.14 teachers' room	29 m²
3.15 second stage classroom	54 m²
3.16 rest area	40 m²
3.17 second stage classroom	60 m²
3.18 art	50 m²
3.19 toilets	23 m²
3.20 language classroom	46 m²
3.21 second stage classroom	65 m²
3.22 rest area	60 m²
3.23 second stage classroom	58 m²
3.24 teachers' room	17 m²
3.25 stairs	17 m²
3.26 teachers' room	17 m²
3.27 second stage classroom	58 m²
3.28 rest area	60 m²
3.29 second stage classroom	65 m²
3.30 language classroom	46 m²
3.31 toilets	23 m²
3.32 music	50 m²
3.33 second stage classroom	60 m²
3.34 rest area	60 m²
3.35 second stage classroom	55 m²
	1682 m²



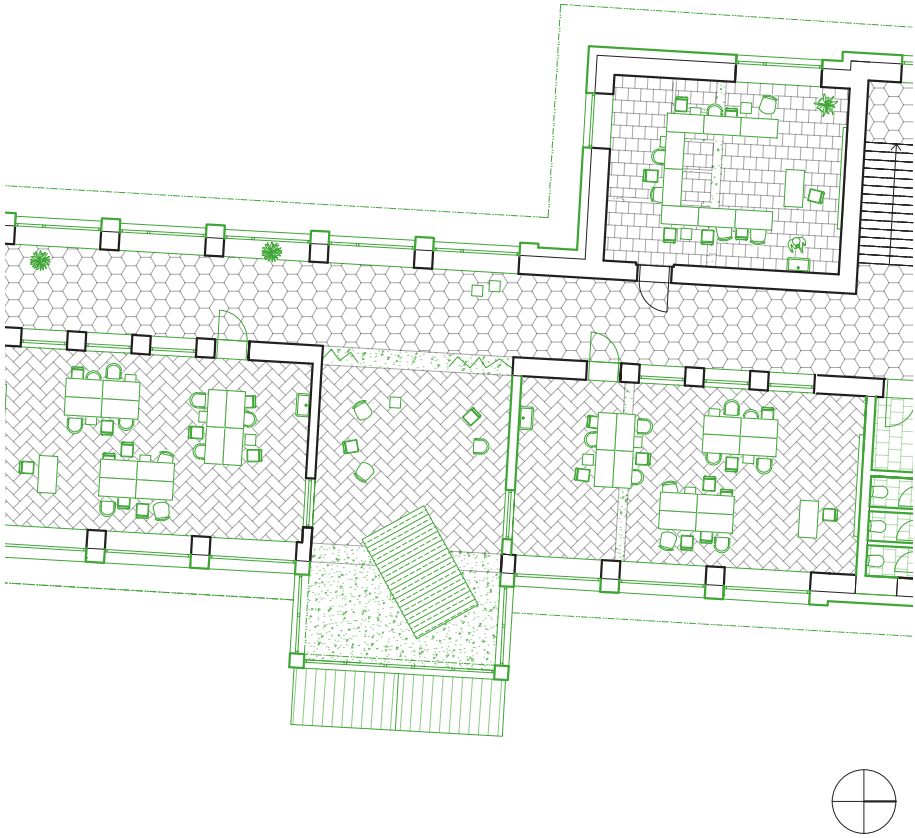
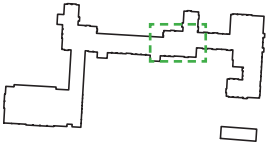
SPECIALISED
SECTION

natural sciences classrooms
laboratories



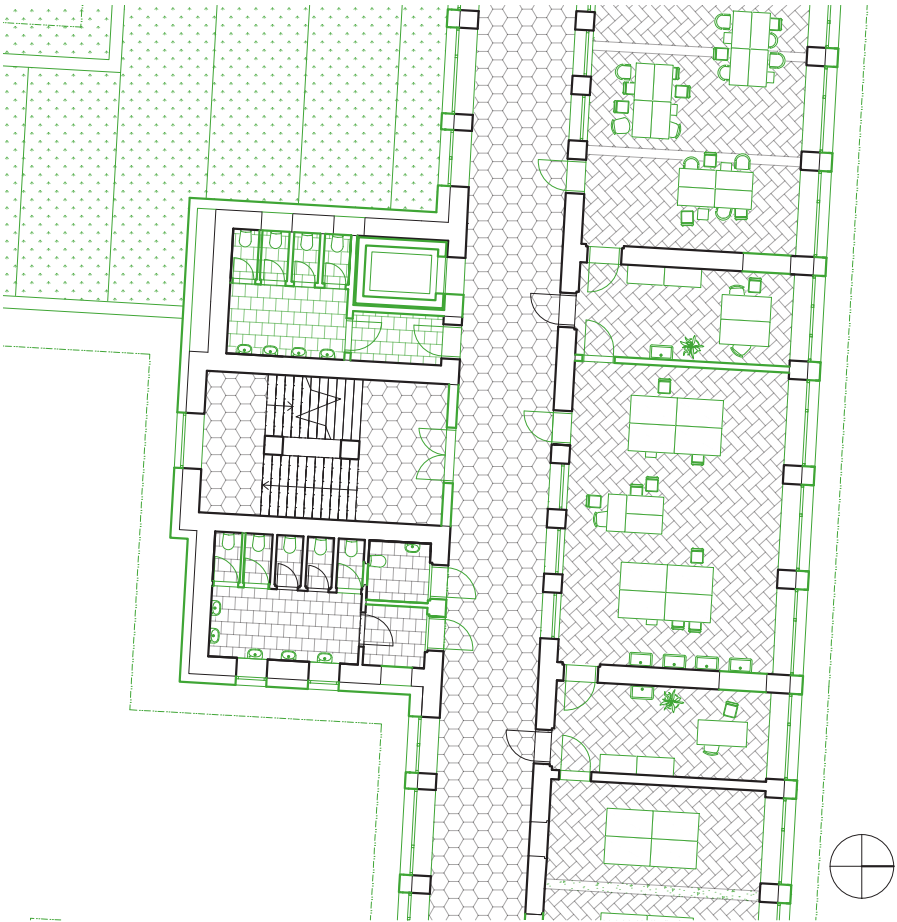
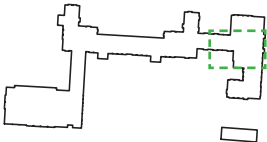
NOOK AND ENFILADE

classrooms
nook and enfilade



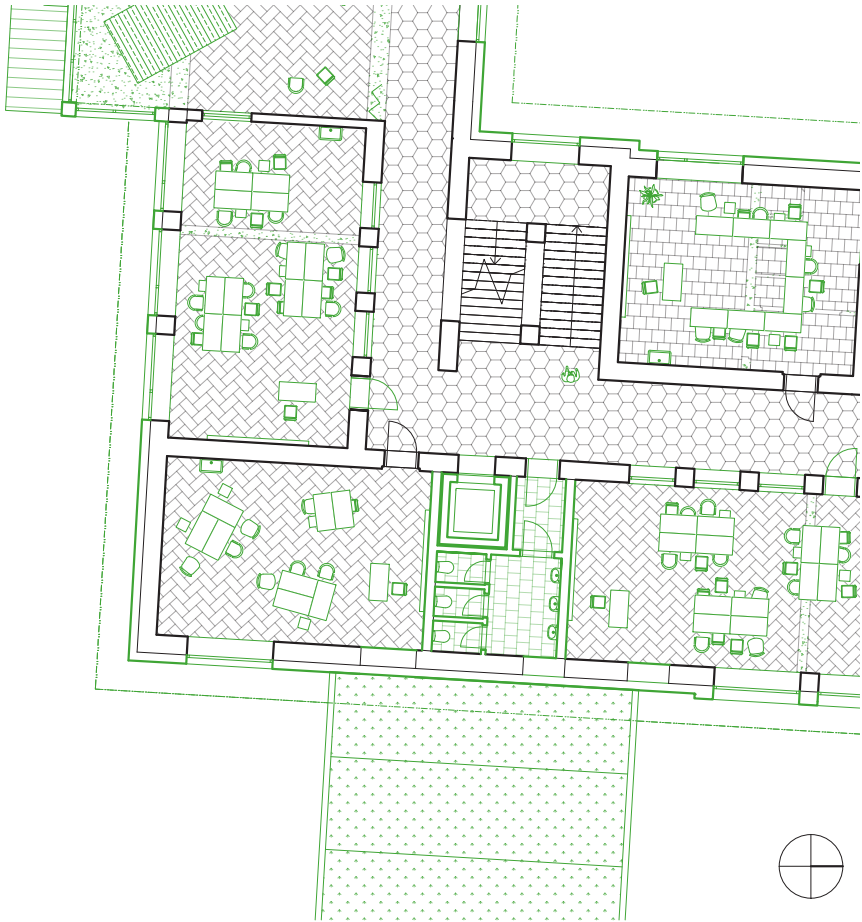
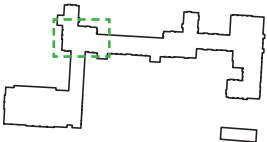
SPECIALISED
SECTION

natural sciences
classrooms
laboratories



SECOND STAGE

second stage classrooms
language classroom



INGLENOOK

George Smith, *Chimney Corner*, oil on panel, 29.5 x 40.5 cm, 1852, <https://www.mutualart.com/Artwork/Chimney-Corner/B88B7A02128A913C>.

an element providing a sense of domesticity



SCHOOL NOOK

1:25 model

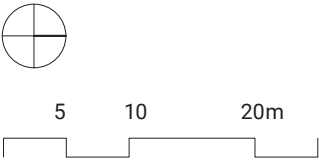
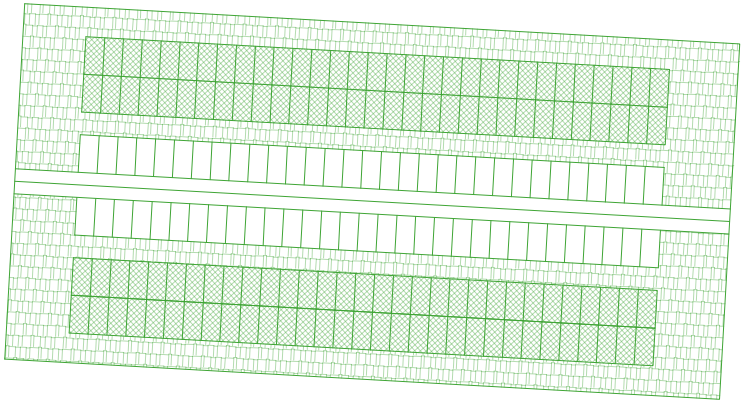
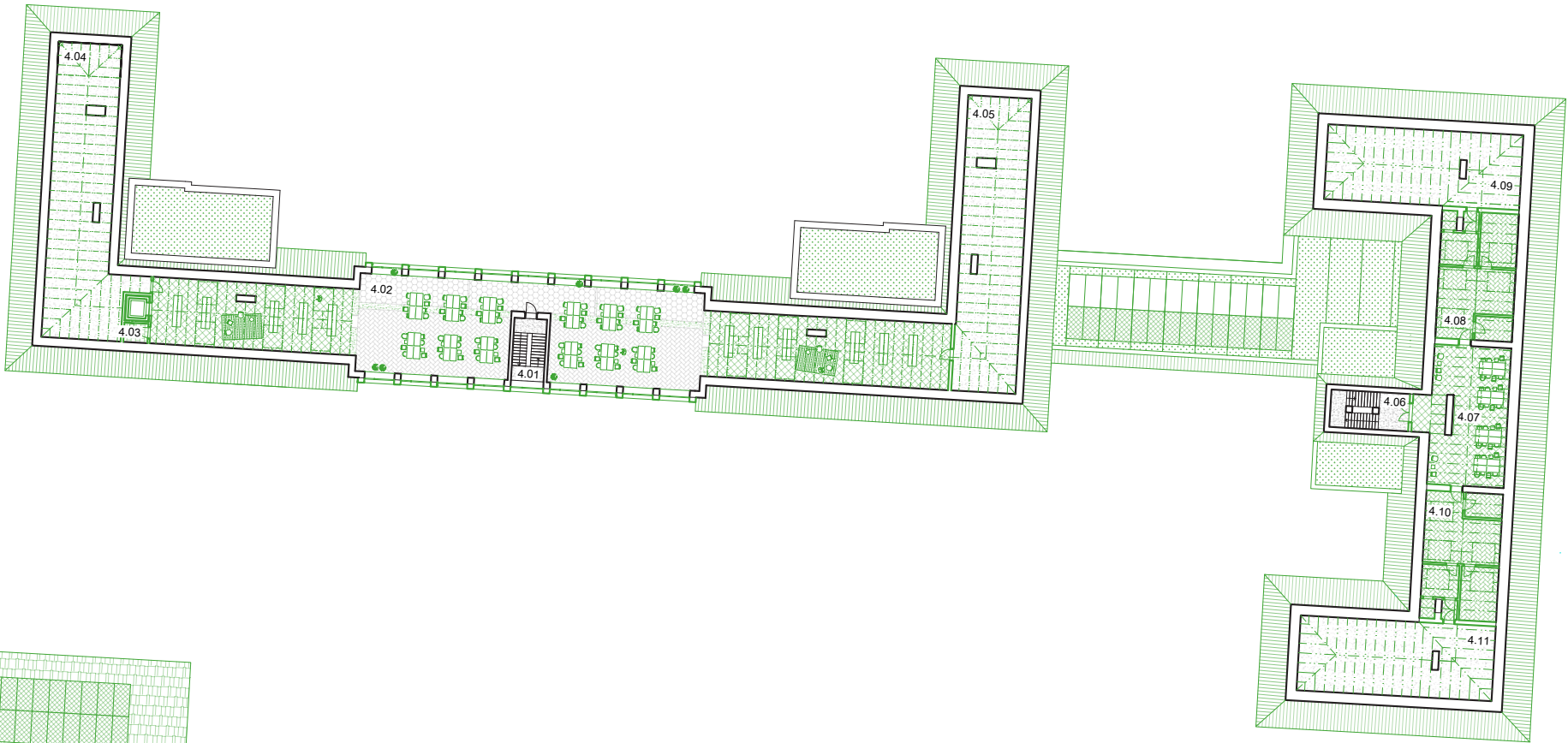
carpet, flowers, curtains and drapes creating an intimate environment

informal classroom extension



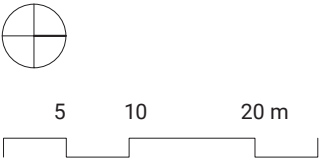
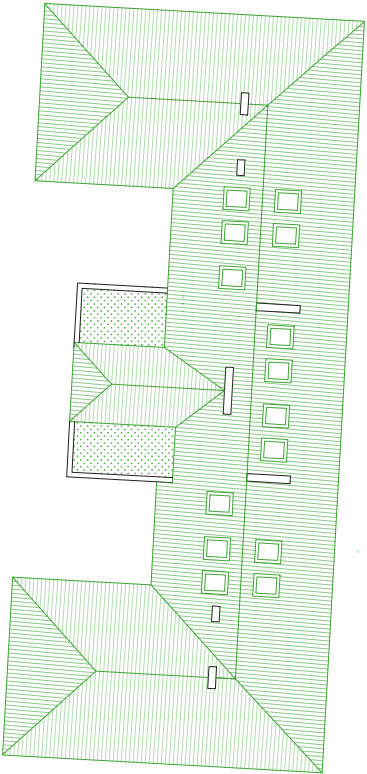
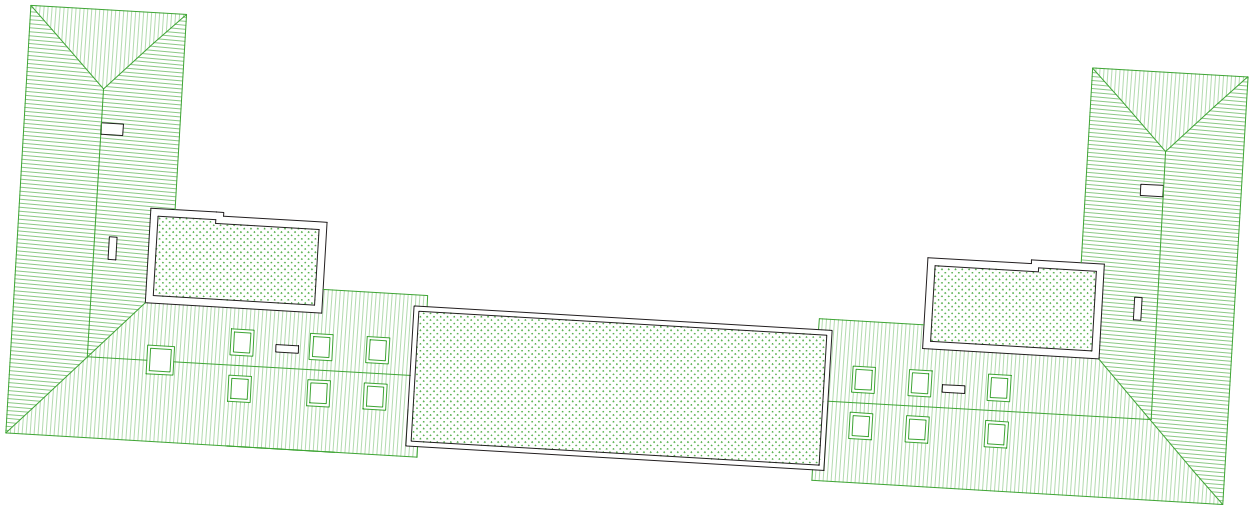
THIRD FLOOR

4.01 stairs	17 m ²
4.02 library	531 m ²
4.03 toilets	4 m ²
4.04 technologies	172 m ²
4.05 technologies	172 m ²
4.06 stairs	25 m ²
4.07 coworking space	92 m ²
4.08 school staff apartment	85 m ²
4.09 technologies	126 m ²
4.10 school staff apartment	85 m ²
4.11 technologies	126 m ²
	1435 m ²



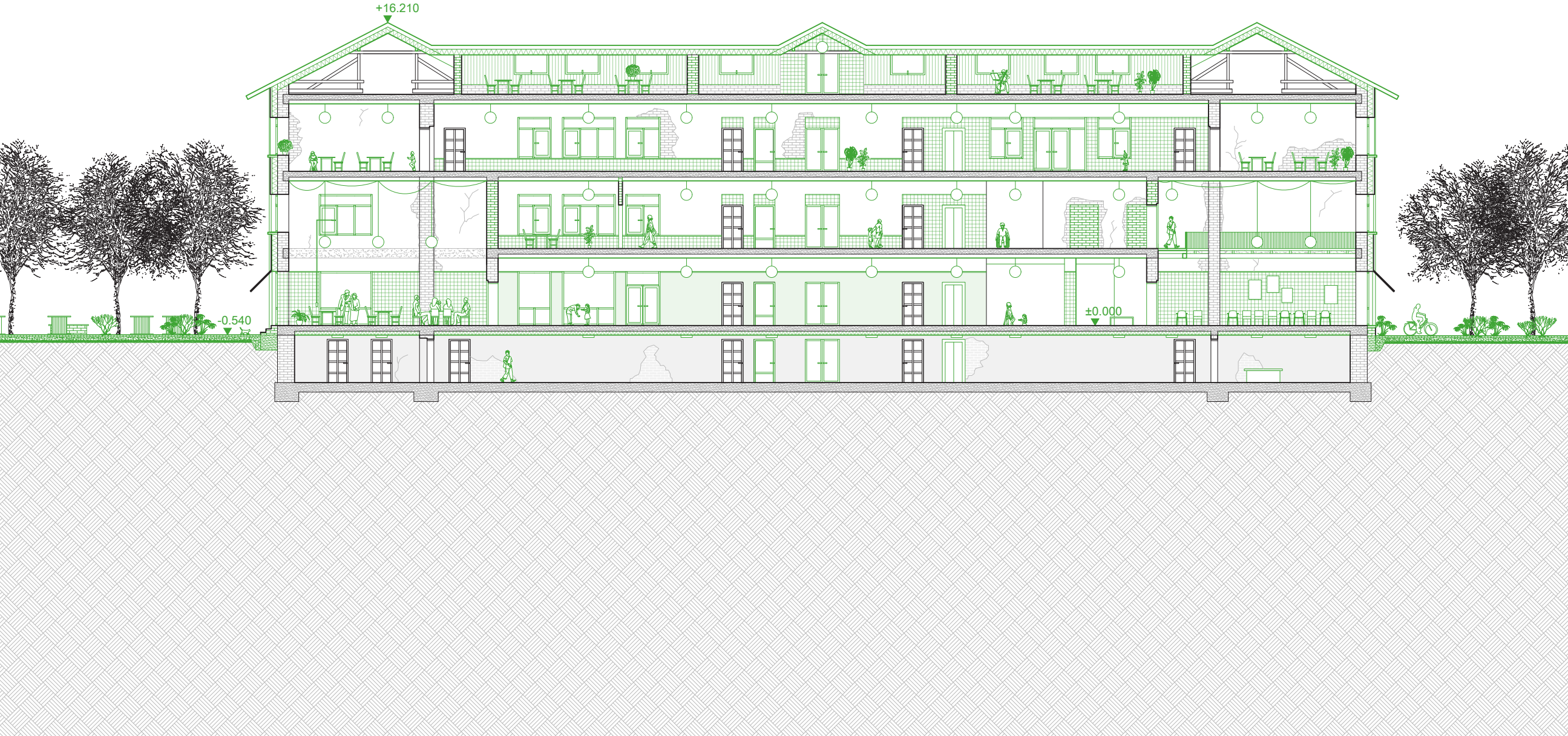
ROOFS

lightweight extensive sedum roofs
with skylights
solar panels



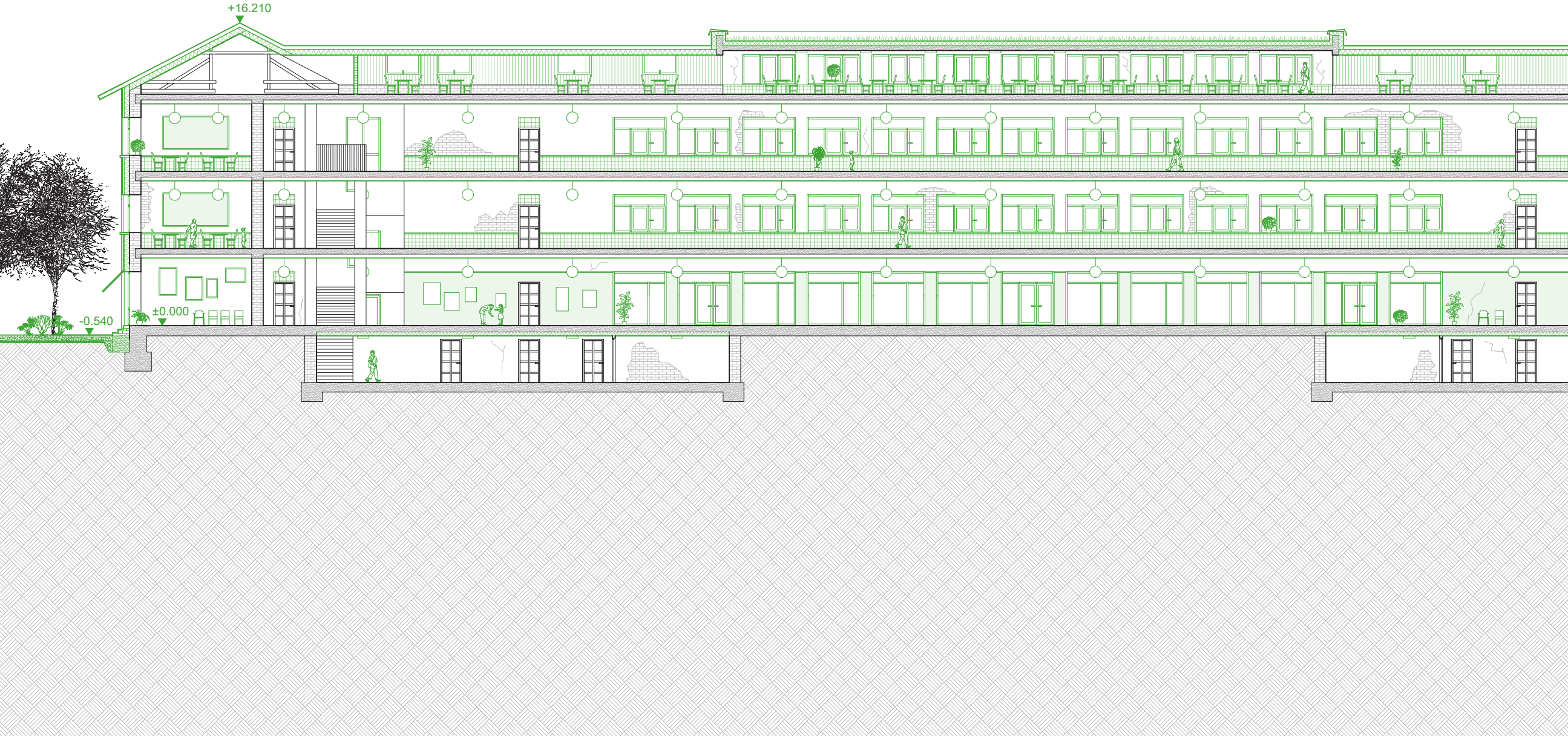
CROSS SECTION

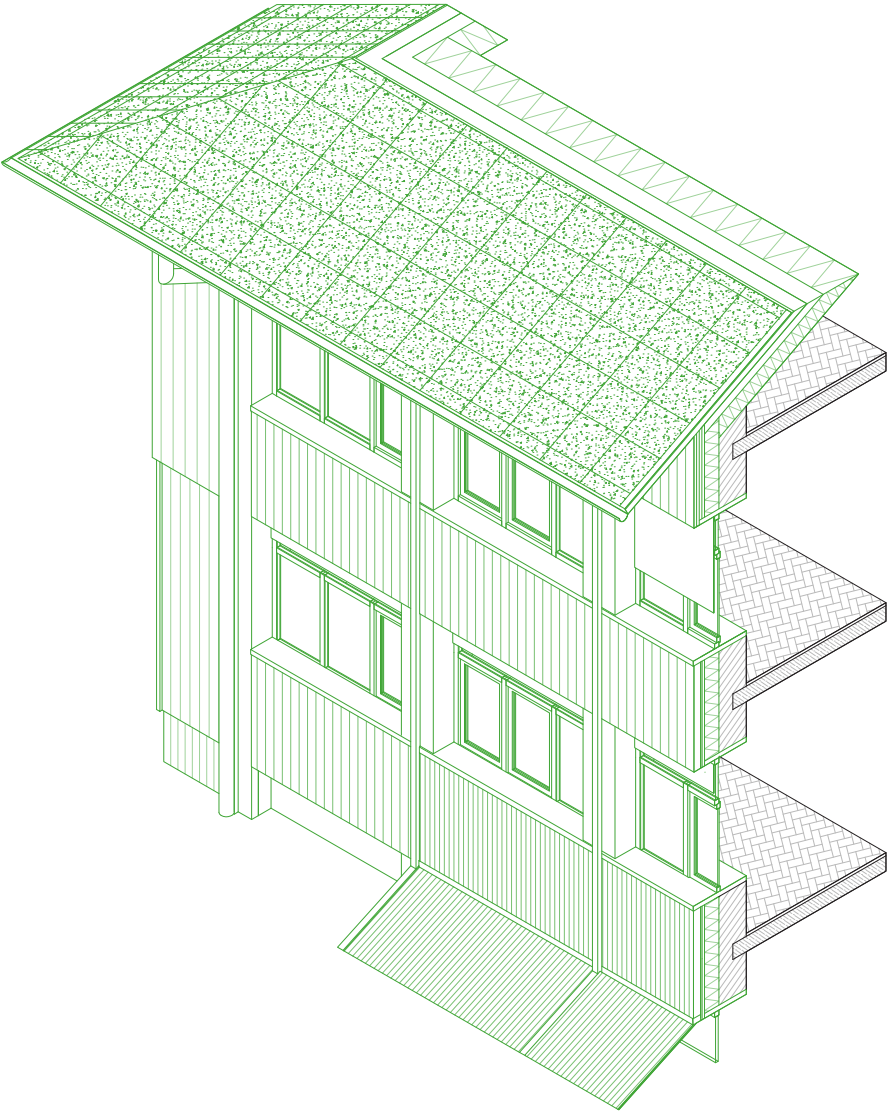
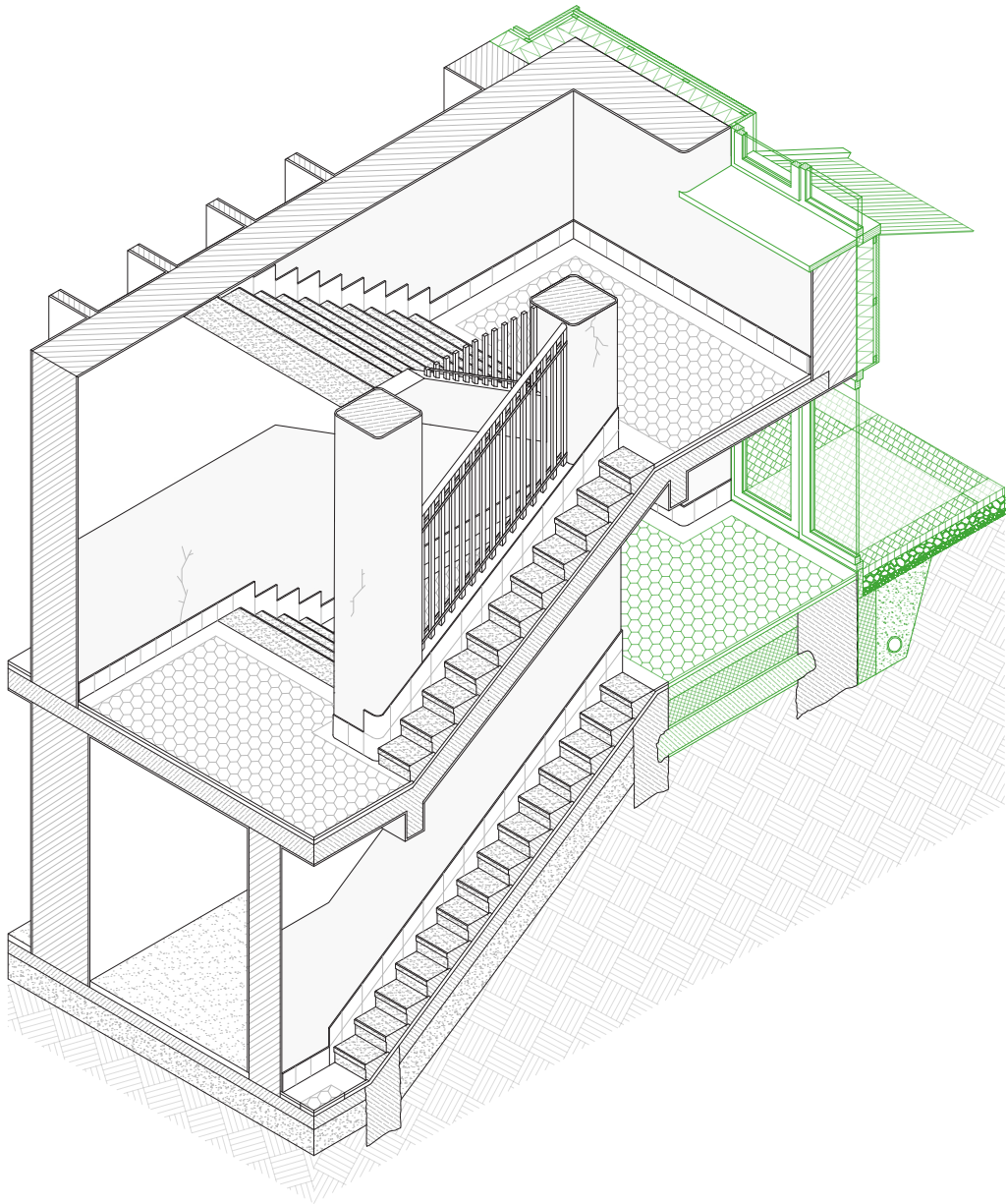
building IV.
double-height spaces



LONGITUDINAL SECTION

building V.





CLIMATE DESIGN

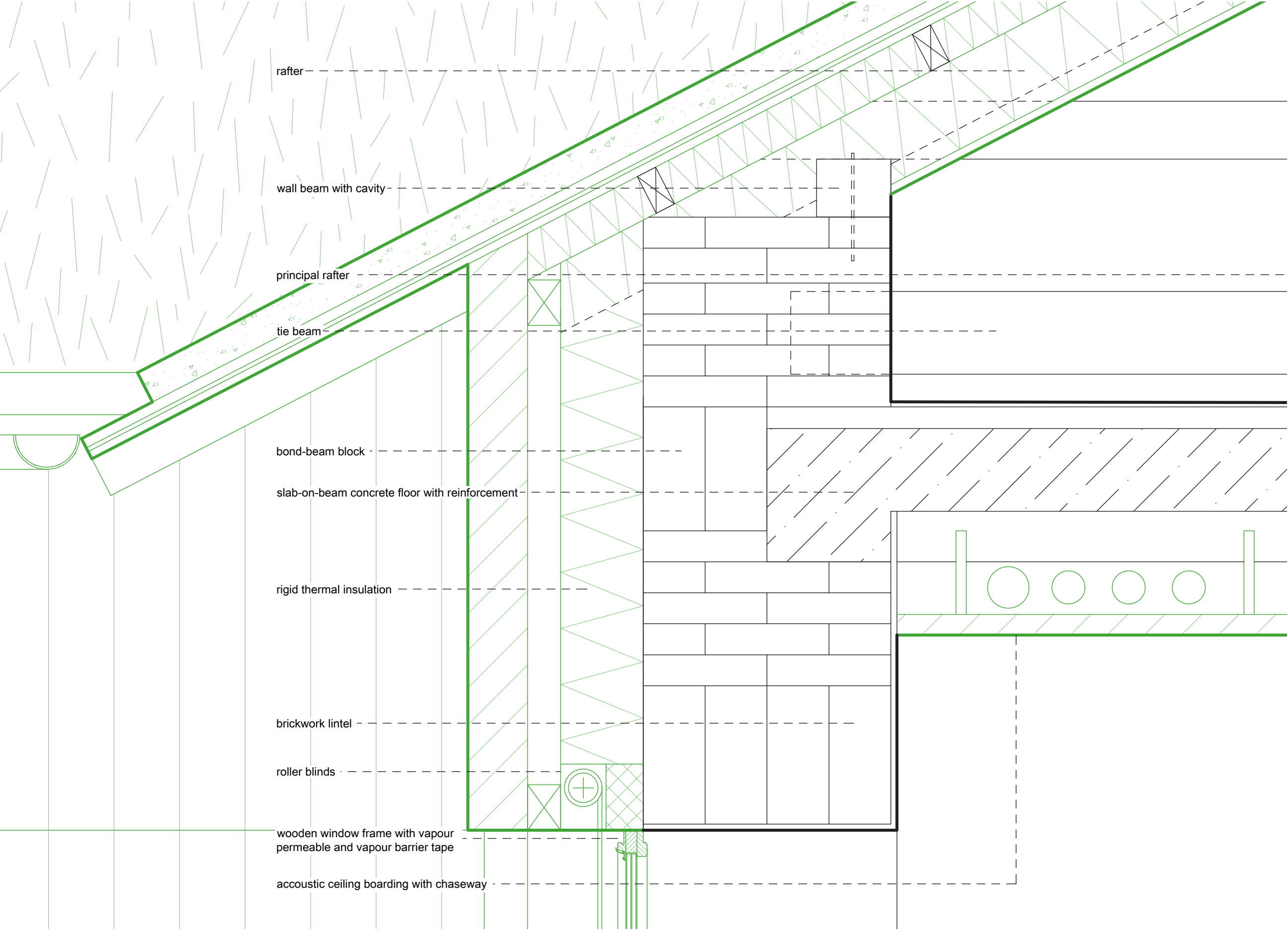
heating system
thermal insulation
ventilation



CLIMATE DESIGN

- rainwater collection
- shading
- solar gains
- cooling



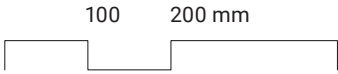


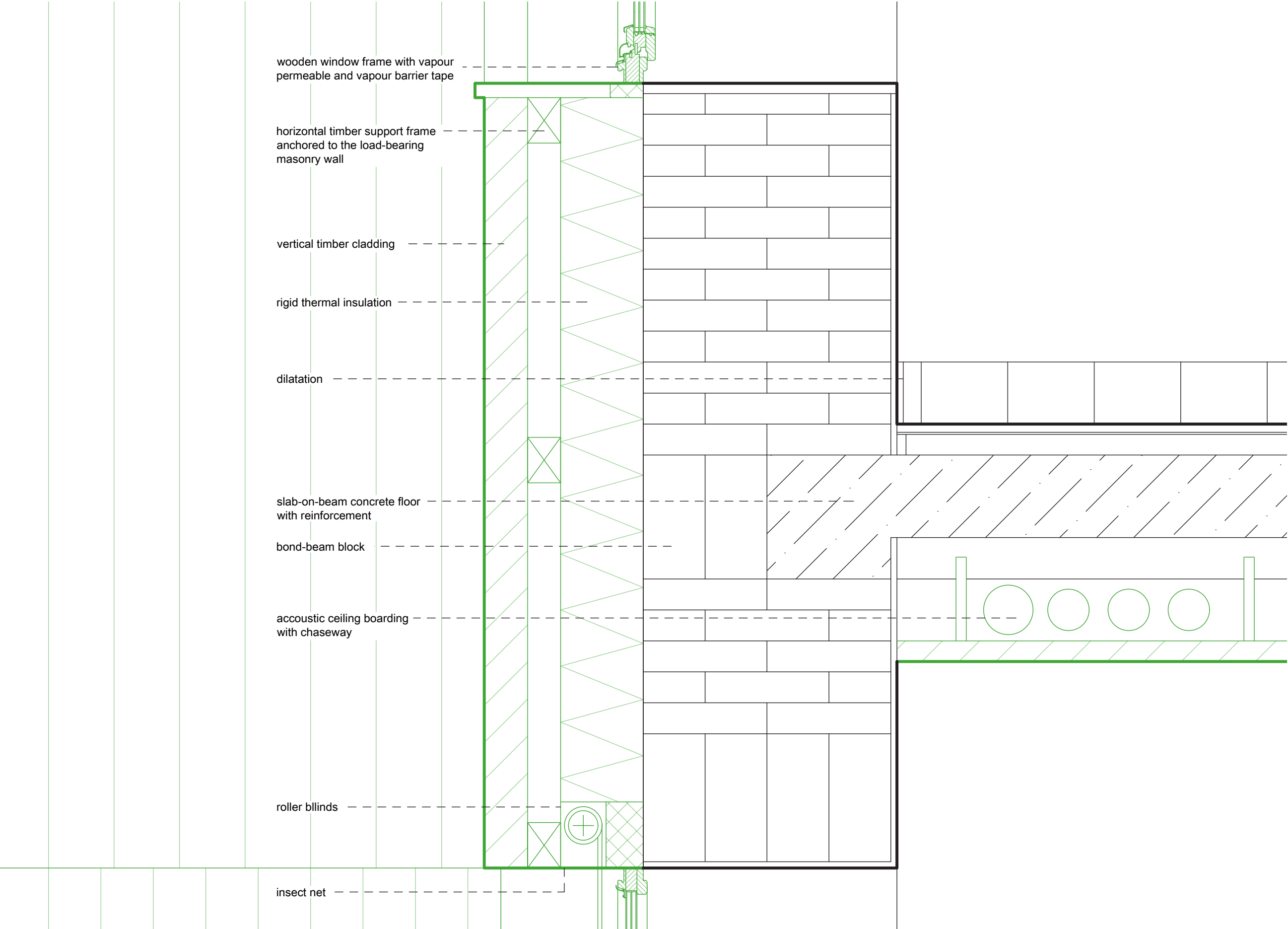
PERIMETER WALL

- vertical timber
- cladding 25 mm
- horizontal timber support frame 40 mm
- waterproof insulation foil
- rigid thermal insulation 200 mm
- vapour-proof foil
- masonry wall 600 mm
- interior plaster 15 mm

PURLIN ROOF

- ceiling panelling to purlins 25 mm
- vapour barrier
- purlins and rigid thermal insulation (120 + 80 mm)
- waterproofing
- boarding 25 mm
- waterproofing
- hydrophilic boards 50 mm
- Sedum acre*



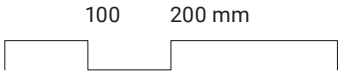


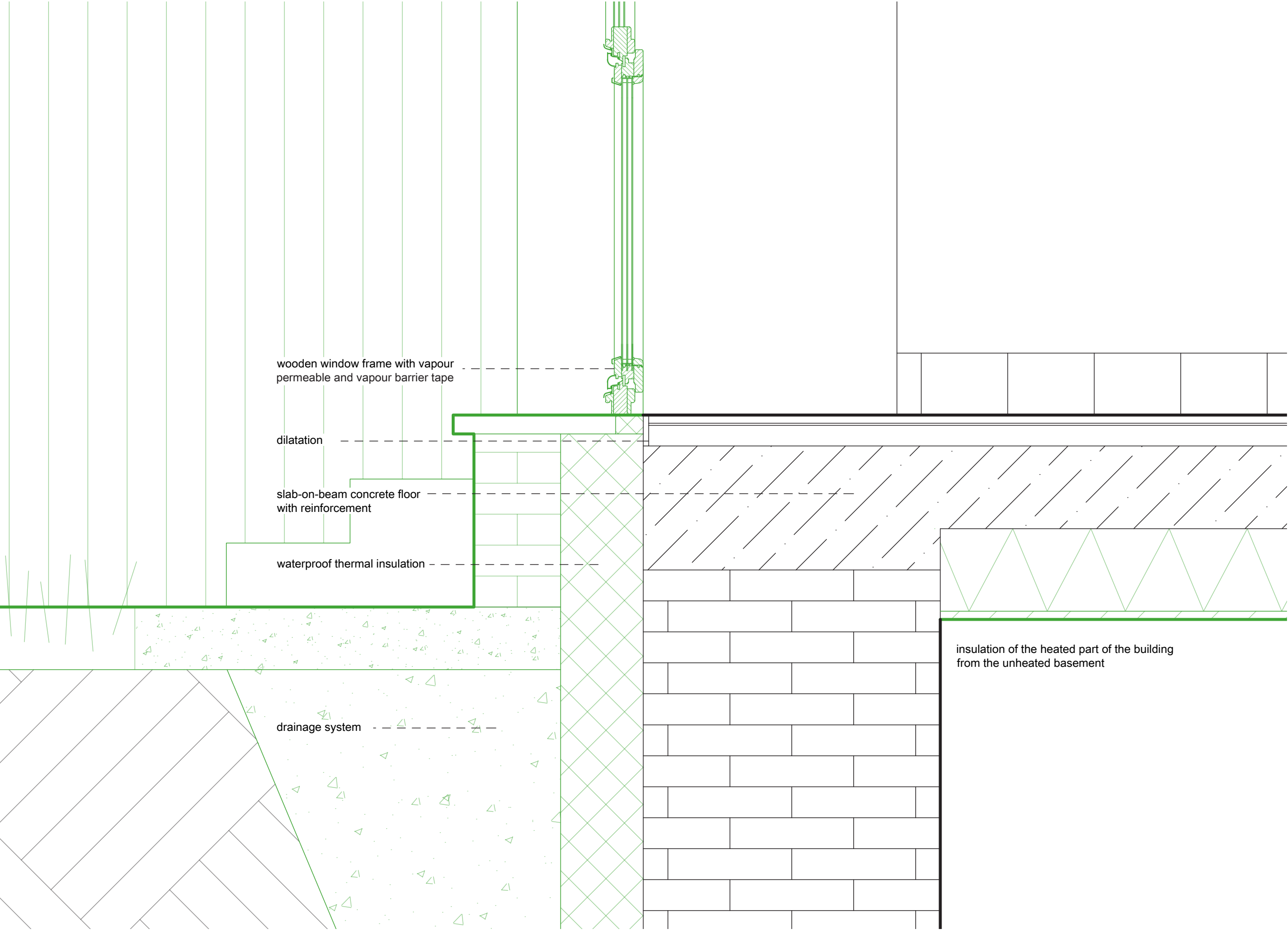
PERIMETER WALL

vertical timber cladding 25 mm
horizontal timber support frame 40 mm
waterproof insulation foil
rigid thermal insulation 200 mm
vapour-proof foil
masonry wall 600 mm

FLOORING

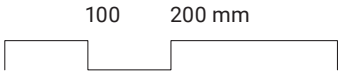
hexagonal tiles 15 mm
adhesive 5 mm
underlying concrete 50 mm
reinforced concrete slab 200 mm with beams 150 mm
thermal insulation with suspended ceiling support structure 200 mm
boarding 25 mm

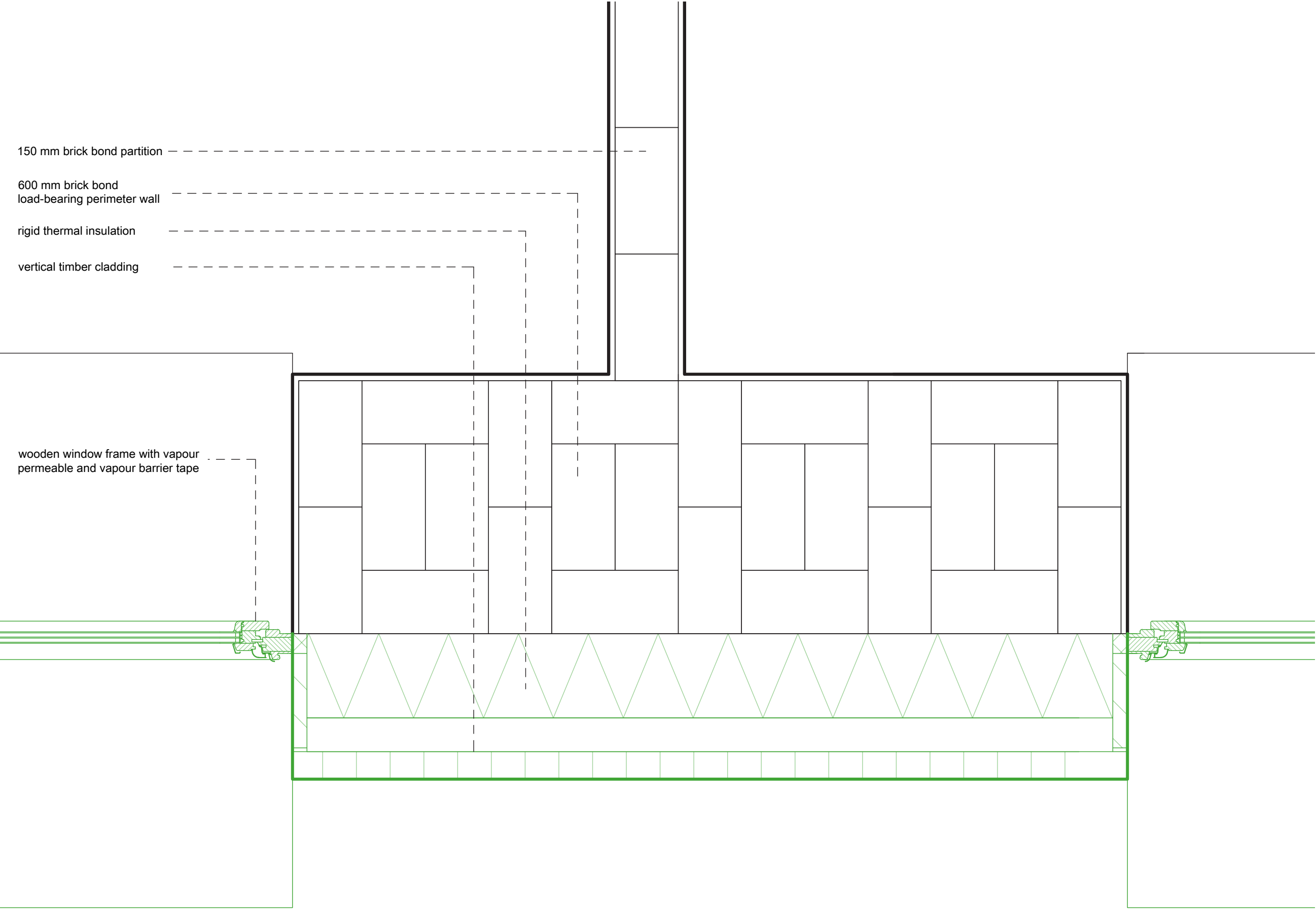




FLOORING

- hexagonal tiles 15 mm
- adhesive 5 mm
- underlying concrete 50 mm
- reinforced concrete slab 200 mm with beams 150 mm
- thermal insulation with suspended ceiling support structure 200 mm
- boarding 25 mm



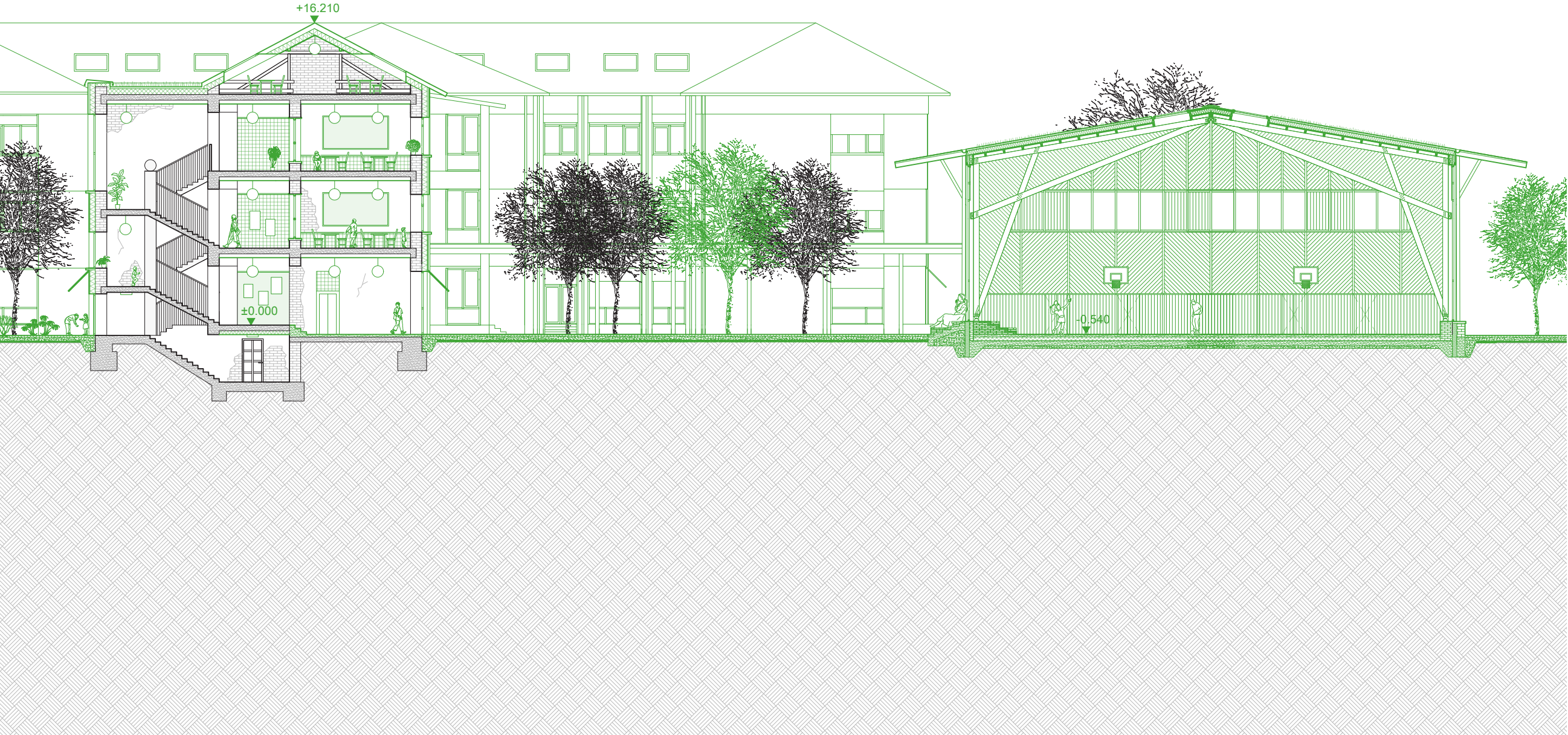


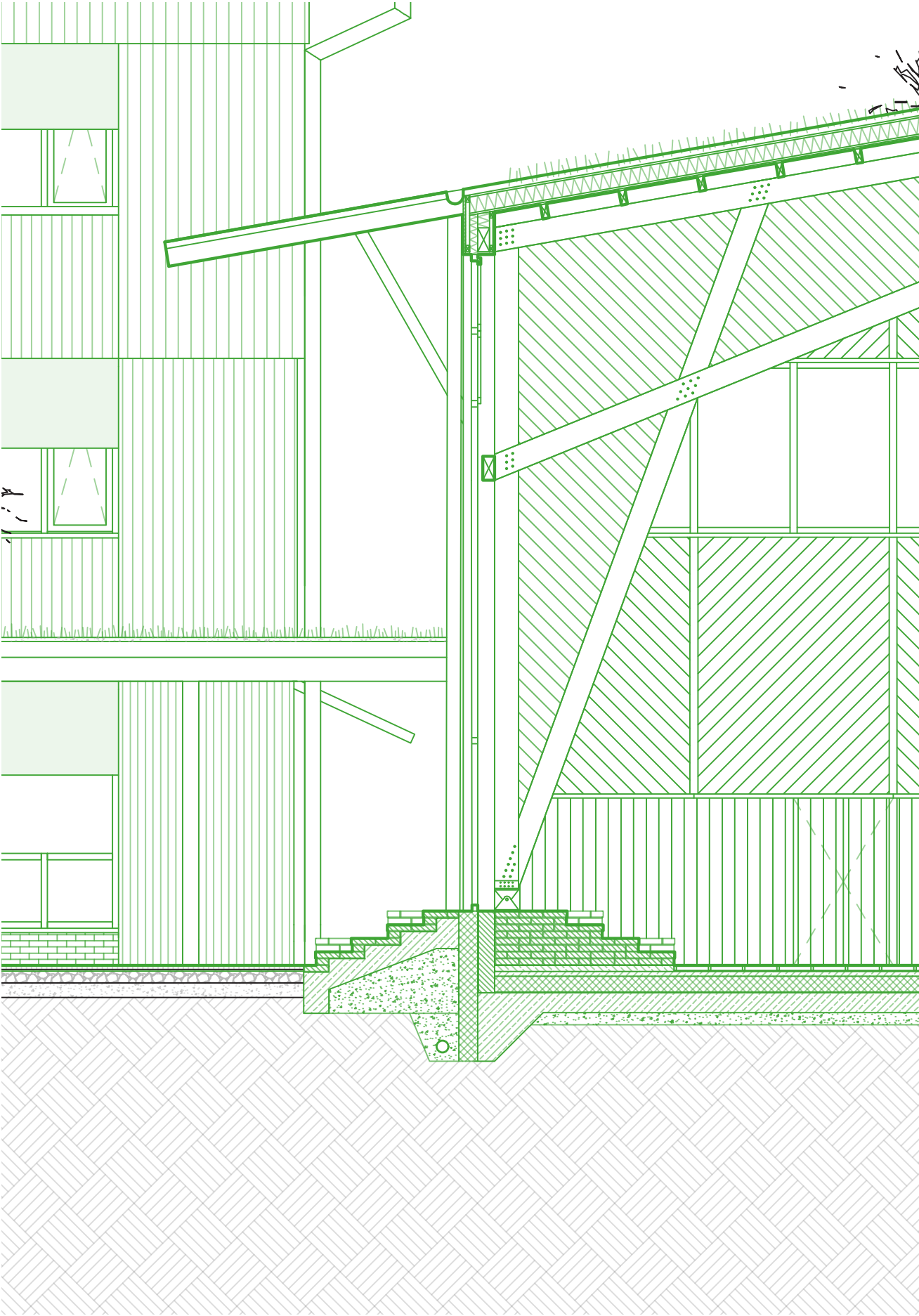
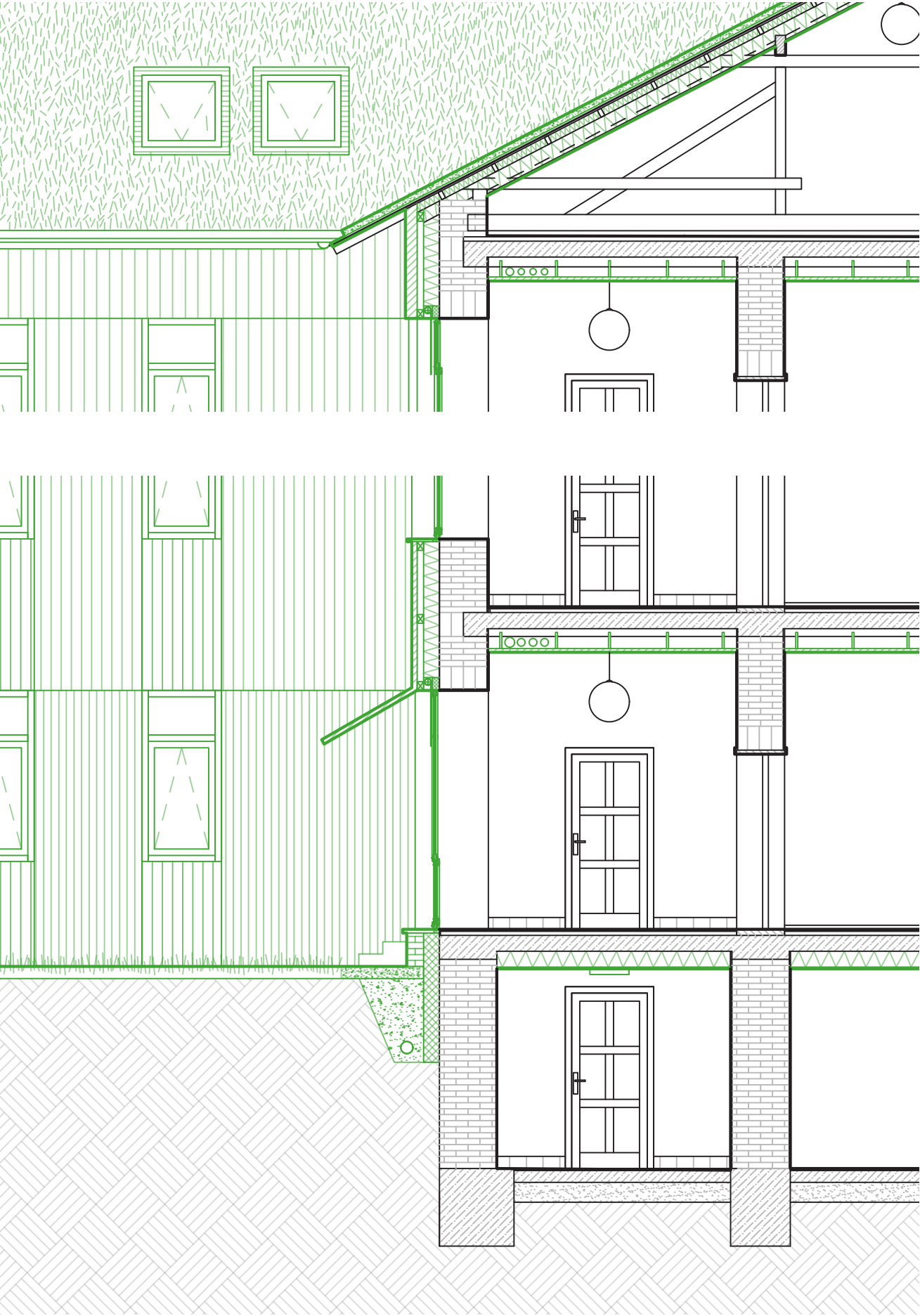
- PERIMETER WALL**
- vertical timber
 - cladding 25 mm
 - horizontal timber support
 - frame 40 mm
 - waterproof insulation foil
 - rigid thermal insulation 200 mm
 - vapour-proof foil
 - masonry wall 600 mm



CROSS SECTION

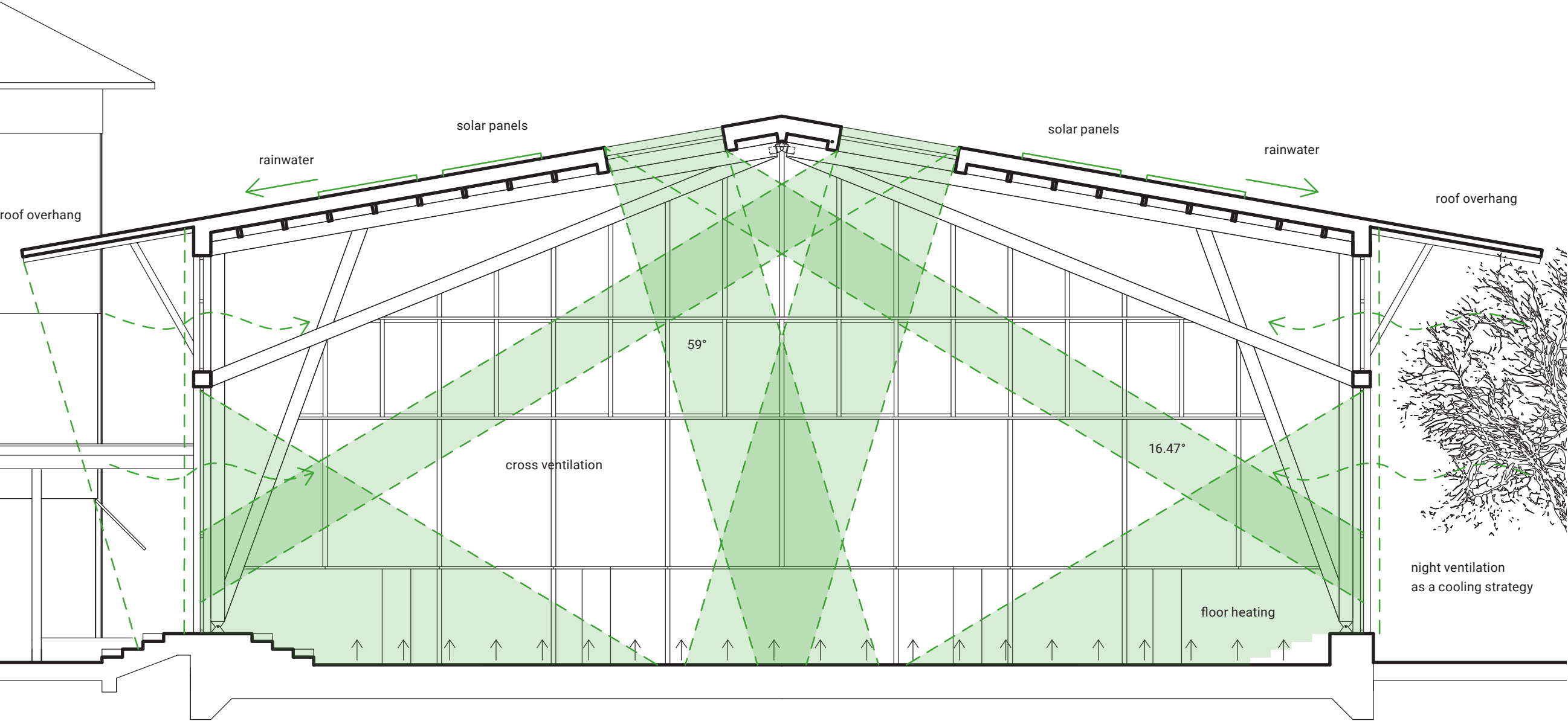
building V.
sports hall

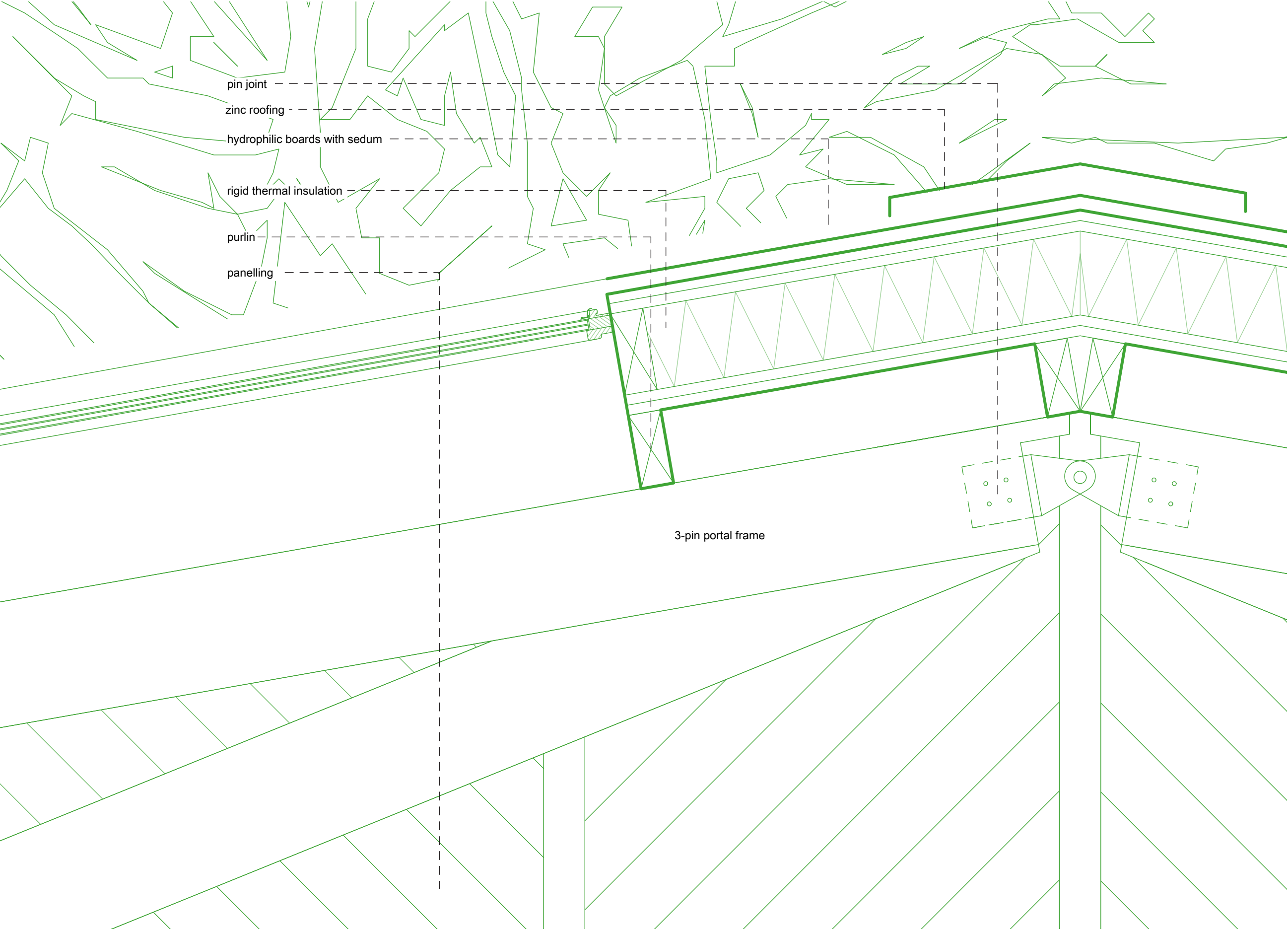




CLIMATE DESIGN

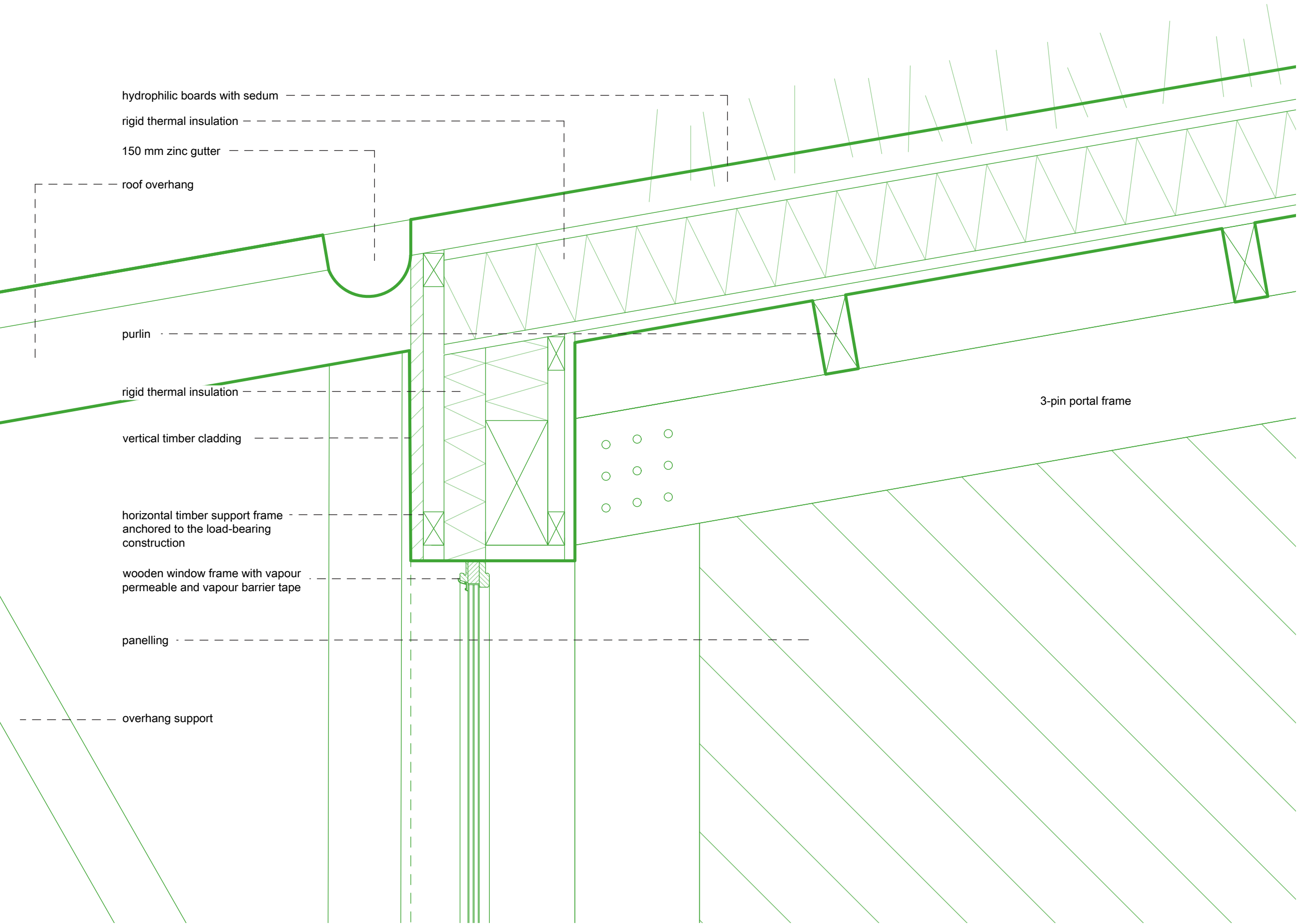
- rainwater collection
- solar gains
- cooling
- ventilation





PURLIN ROOF

- purlin 160 mm
- boarding 2 x 25 mm
- vapour barrier
- thermal insulation 250 mm
- boarding 25 mm
- waterproofing
- hydrophilic boards 50 mm
- Sedum acre*

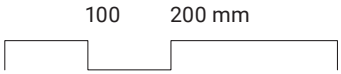


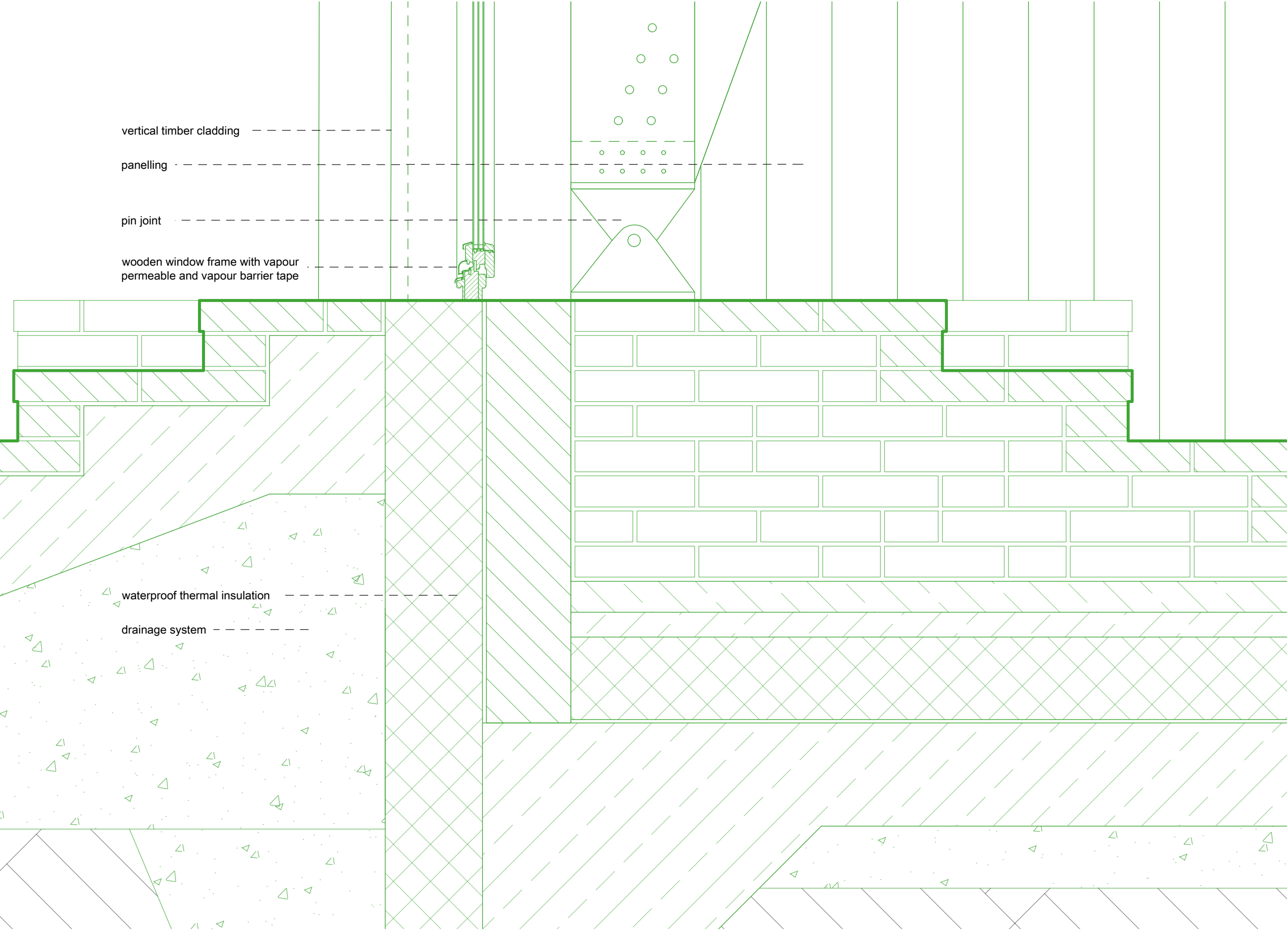
PERIMETER WALL

vertical timber cladding 25 mm
horizontal timber support
frame 40 mm
waterproof insulation foil
perimeter wall frame construction
filled with rigid insulation
100 and 150 mm
vapour-proof foil
horizontal timber support
frame 40 mm
vertical timber cladding 25 mm

PURLIN ROOF

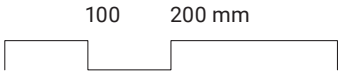
purlin 160 mm
boarding 2 x 25 mm
vapour barrier
thermal insulation 250 mm
boarding 25 mm
waterproofing
hydrophilic boards 50 mm
Sedum acre





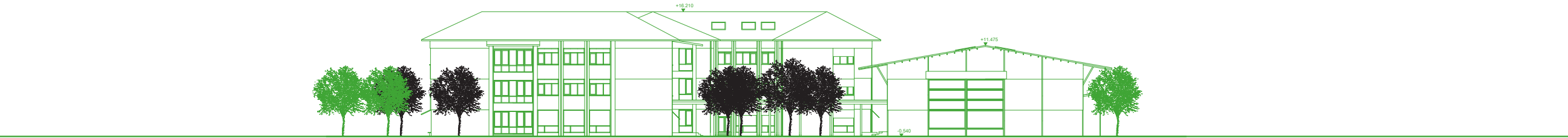
FLOORING

- oak wood 5 mm
- batten 60 x 30 mm
- foam impact pad
- polyethylene separation foil
- anhydrite layer 40 mm
- polyethylene separation foil
- thermal insulation 200 mm
- protective geotextile layer
- waterproofing layer 8 mm
- concrete foundation slab 250 mm
- ballast bed 150 mm

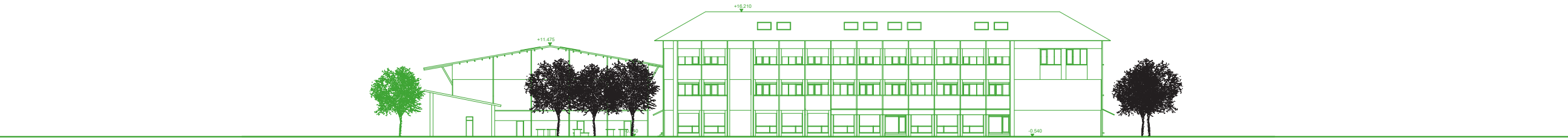


ELEVATIONS

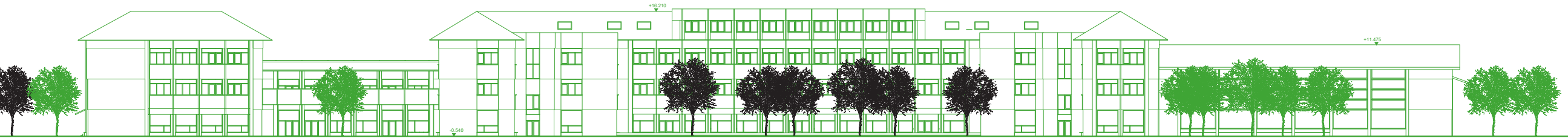
building IV.
building V.
sports hall



south



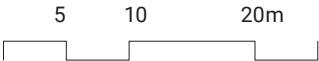
north



west



east



BRAND NEW
FAÇADE

reused metal sheets
reused dark stained
wooden cladding

light blue details
as a reference to the
originally light blue plinths



FAÇADE
IN 5 YEARS

first signs of ageing
common ivy
(self-supporting climber)

Acer platanoides
Platanus acerifolia
Hedera helix



FAÇADE
IN 10 YEARS

ivy cools the building
and keeps higher humidity
in summer

Acer platanoides
Platanus acerifolia
Hedera helix



FAÇADE
IN 15 YEARS

ivy absorbs pollutants
and reduces noise

shelter for insects
and birds

Acer platanoides
Platanus acerifolia
Hedera helix



LIST OF LITERATURE

Balcárek, František, and Karel Storch. 'Deset Let Typizace v Československu'. *Architektura ČSR*, 1958. <https://ndk.cz/view/uuid:27f18a90-d752-11e6-9964-005056825209?page=uuid:632514b0-d8ba-11e6-b333-5ef3fc9ae867>.

Burke, Catherine, and William and Whyte. 'The Spaces and Places of Schooling: Historical Perspectives'. *Oxford Review of Education* 47, no. 5 (3 September 2021): 549–55. <https://doi.org/10.1080/03054985.2021.1973984>.

Cardellino, P., and P. and Woolner. 'Designing for Transformation – a Case Study of Open Learning Spaces and Educational Change'. *Pedagogy, Culture & Society* 28, no. 3 (2 July 2020): 383–402. <https://doi.org/10.1080/14681366.2019.1649297>.

Dewey, John. 'The School as Social Center'. *The Elementary School Teacher* 3, no. 2 (1902): 73–86.

Di Nallo, Marco. 'Die Schule Als Offenes Haus: School Building and Leisure in Switzerland during the 1950s and 1960s'. *The Journal of Architecture* 18, no. 5 (1 October 2013): 647–71. <https://doi.org/10.1080/13602365.2013.835854>.

Herman, Frederik, and Jo and Tondeur. 'Untangling the Sociomateriality of the Classroom: Biographies of School Spaces (c. 1960–2014)'. *Oxford Review of Education* 47, no. 5 (3 September 2021): 681–95. <https://doi.org/10.1080/03054985.2021.1924654>.

Kasalický, Václav. 'Rozvíjet Dále Obsahovou i Metodickou Stránku Projektování'. *Domov - Kultura Bydlení a Životní Styl*, 1979.

Kurz, Daniel, Alan Wakefield, Karin Dangel, Zürich, and ETH Wohnforum - ETH CASE, eds. *Schulhausbau - der Stand der Dinge: der Schweizer Beitrag im internationalen Kontext ; [erscheint anlässlich der Ausstellung 'Schulhausbau. Der Stand der Dinge', Zürich, 29. Juni bis 11. Juli 2004]: the Swiss contribution in an international context = School buildings - the state of affairs*. Basel Berlin: Birkhäuser, 2004.

Laboutka, Karel Josef. *Stavba a zařízení školy*. Praha: Komenium, 1947.

Laboutka, Karel Josef, and František Koukal. *Pedagogické a hygienické požadavky na stavbu škol*. Praha: Státní nakladatelství technické literatury, 1961.

Lacomba Montes, Paula, and Alejandro and Campos Uribe. 'Mary and David Medd's Work: Domesticity in Postwar British School Design (1949–72)'. *Oxford Review of Education* 47, no. 5 (3 September 2021): 597–617. <https://doi.org/10.1080/03054985.2021.1924652>.

Lawrence, Steve, and Benjamin Stæhli. *Montessori Architecture: A Design Instrument for Schools*. Zurich: Park Books, 2023.

Niemi, Kreetta, Minkkinen, Jaana, and Anna-Maija and Poikkeus. 'Opening up Learning Environments: Liking School among Students in Reformed Learning Spaces'. *Educational Review* 76, no. 5 (28 July 2024): 1191–1208. <https://doi.org/10.1080/00131911.2022.2098927>.

Paula Lacomba Montes and Alejandro Campos Uribe. 'From Classrooms to Centres: Mary and David Medd's Contribution to Post-War School Design in Britain', n.d.

Saint, Andrew. *Towards a Social Architecture: The Role of School-Building in Post-War England*. New Haven: Yale University Press, 1987.

Schránil, Bedřich. 'Racionalizace ve výstavbě škol v ČSR'. *Architektura ČSR*, 1958. ABA001.

Starý, Oldřich. 'První Sjezd Svazu Slovenských Architektů: Nástup k Rozhodujícímu Boji Za Vyšší Ekonomickou, Technickou i Kulturní Hodnotu Investiční Výstavby'. *Architektura ČSR*, 1960. <https://ndk.cz/view/uuid:982e2860-df48-11e6-9964-005056825209?page=uuid:d2aa6130-df83-11e6-b333-5ef3fc9ae867&fulltext=kritika%20typizace>.

Süssová, Anna. *Kam Jsme Dospěli v Hromadné Výchově Děti*. Brno: Brněnská Matice školská, 1912. <https://ndk.cz/view/uuid:65d007a0-22d9-11e8-a0cf-005056827e52?page=uuid:d9210cf0-59d8-11e8-9d1d-5ef3fc9bb22f&fulltext=mate%C5%99sk%C3%A1%20%C5%A1kola%20velikost>.

Ústava Československé republiky, Pub. L. No. 150/1948, § 12 (1948). https://www.psp.cz/docs/texts/constitution_1948.html.

